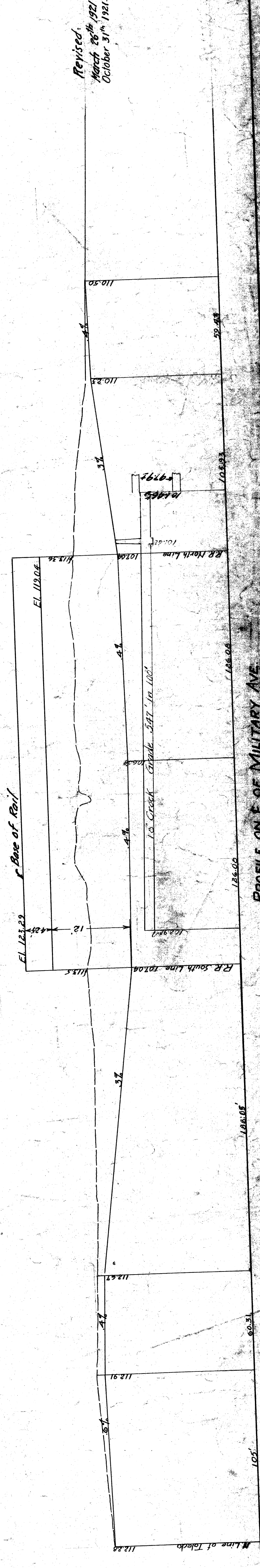
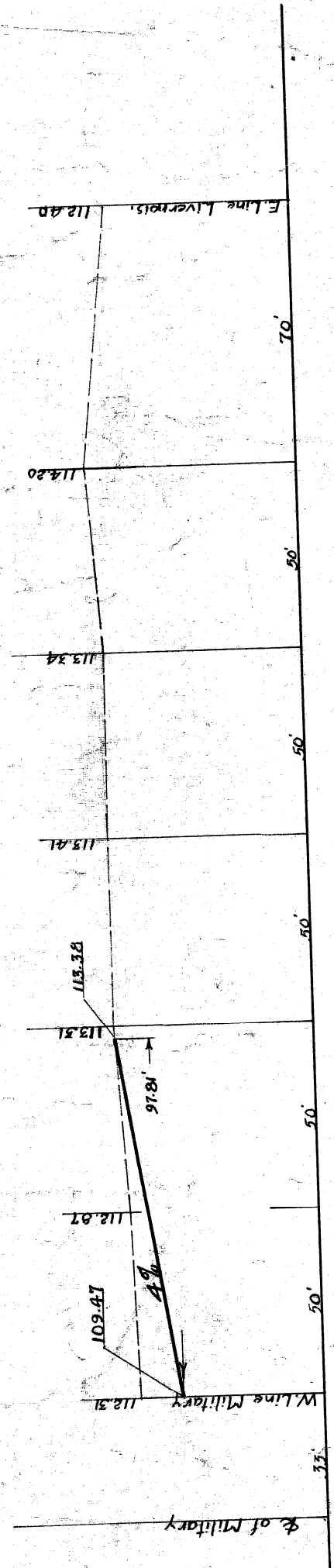
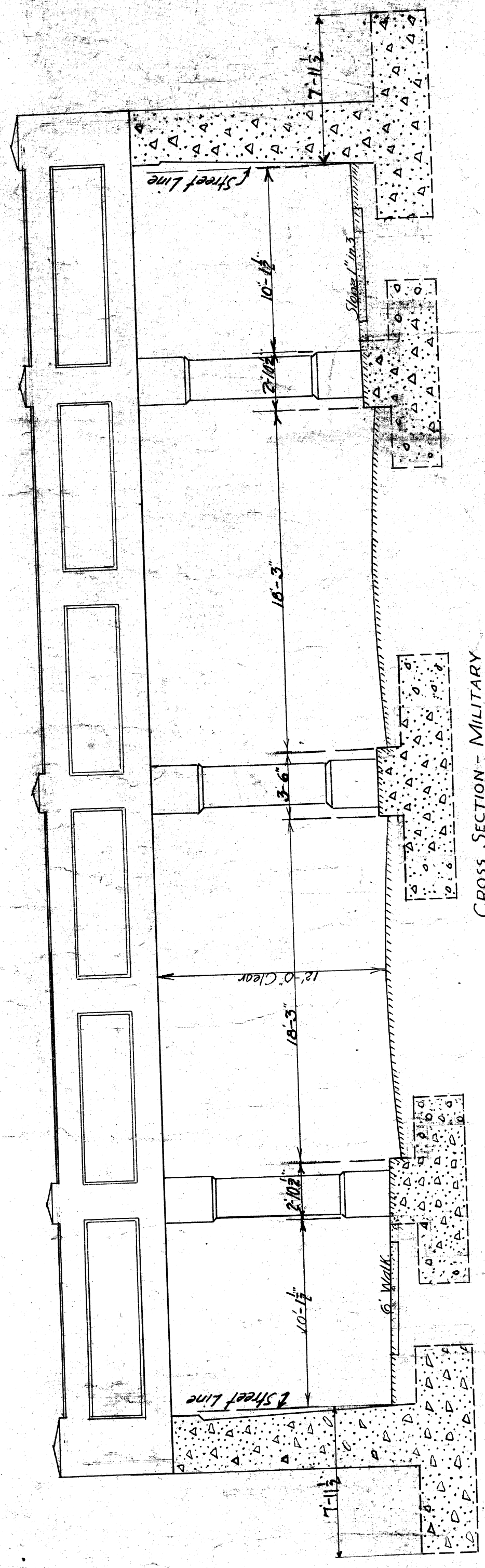
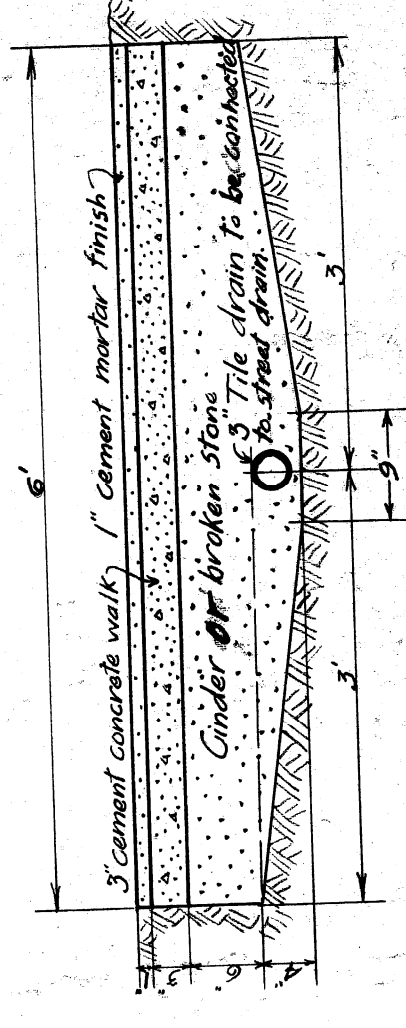
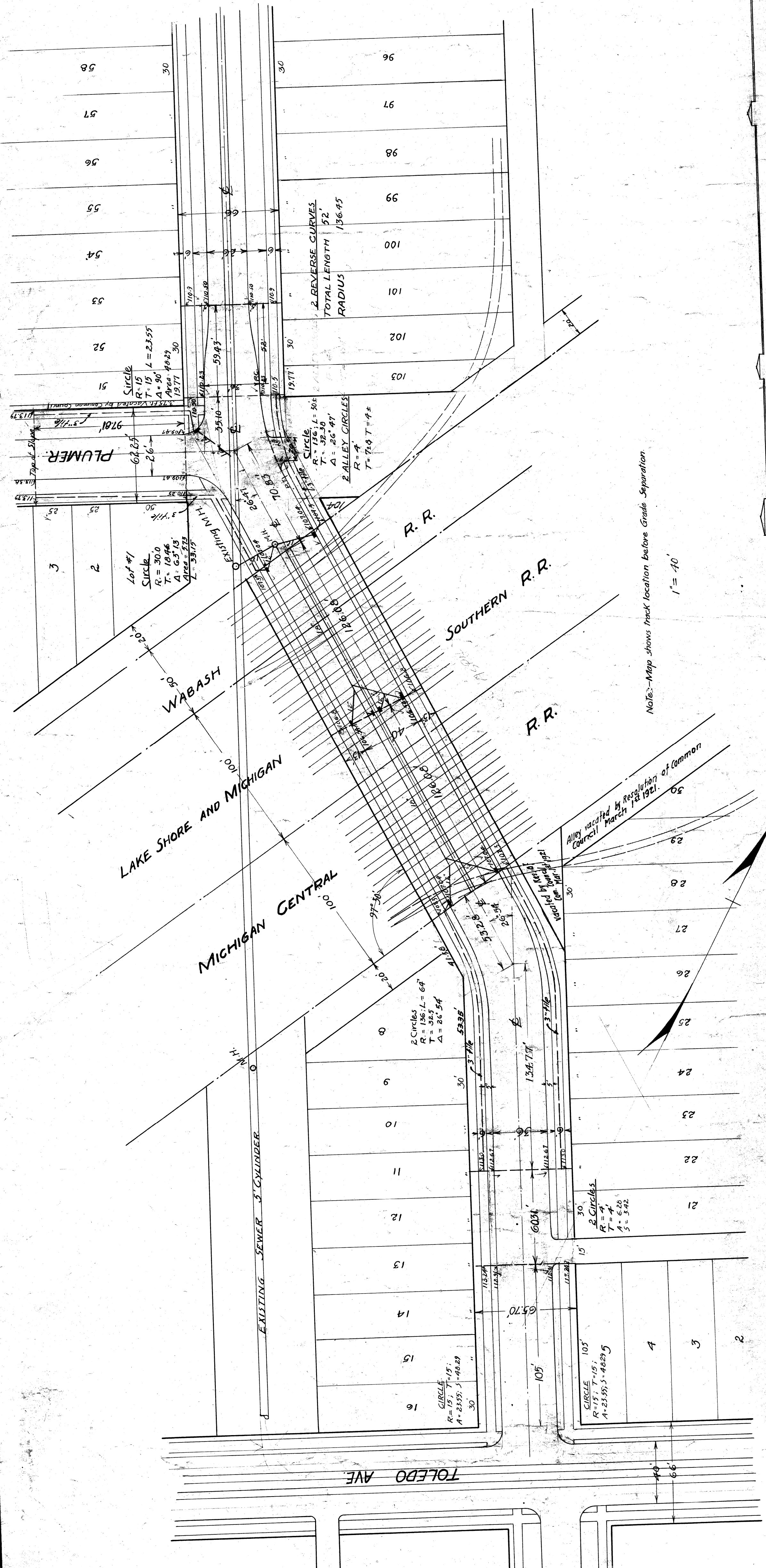


1917
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APPROVED - Oct. 30th 1924
George J. ... ENGINEER
J. ... CHIEF ENGINEER M.C.R.R.

CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
OFFICE OF CITY ENGINEER
DIVISION OF GRADE SEPARATION AND BRIDGES
MILITARY AVENUE SUBWAY
UNDER
N.Y.C. R.R. - M.C.R.R. - WABASH R.R.

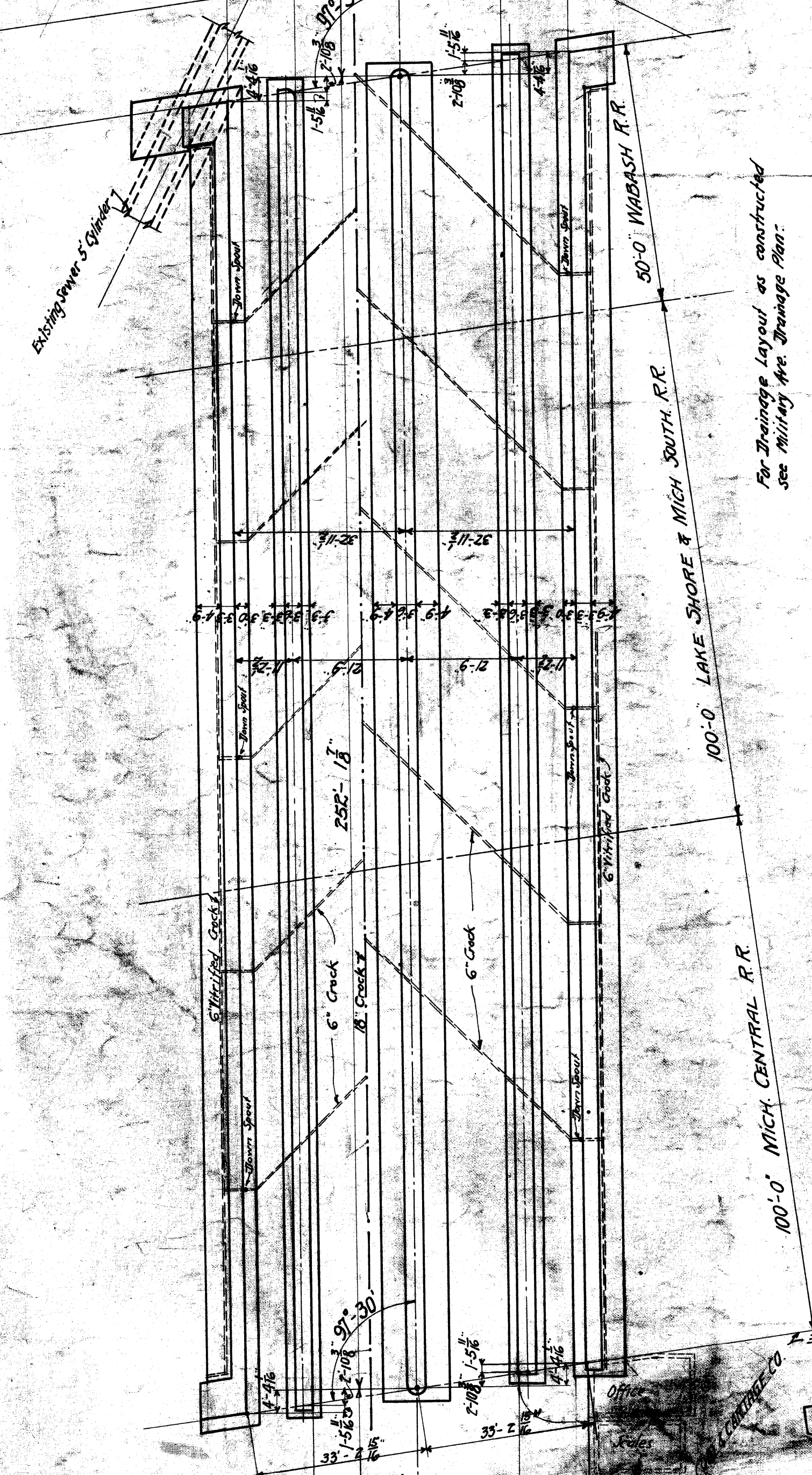
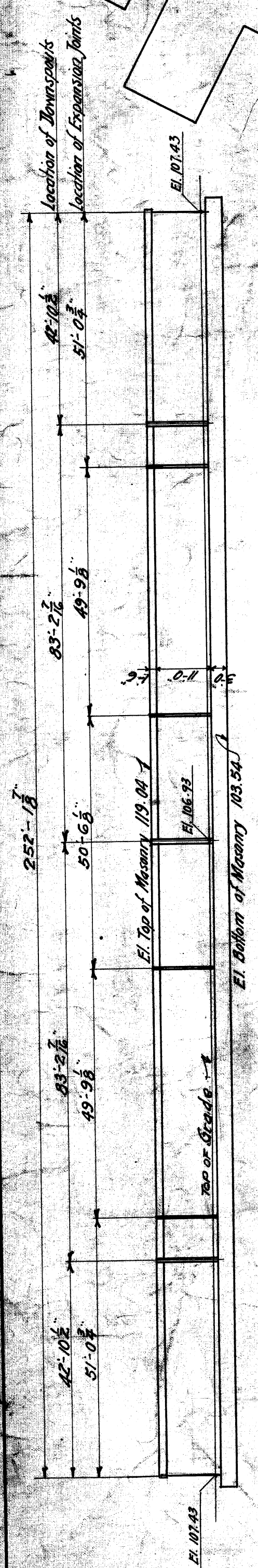
Revised:
March 28th 1921
October 31st 1921

SCALE
HOR. 1" = 40'
VER. 1" = 10'
March 23rd 1921

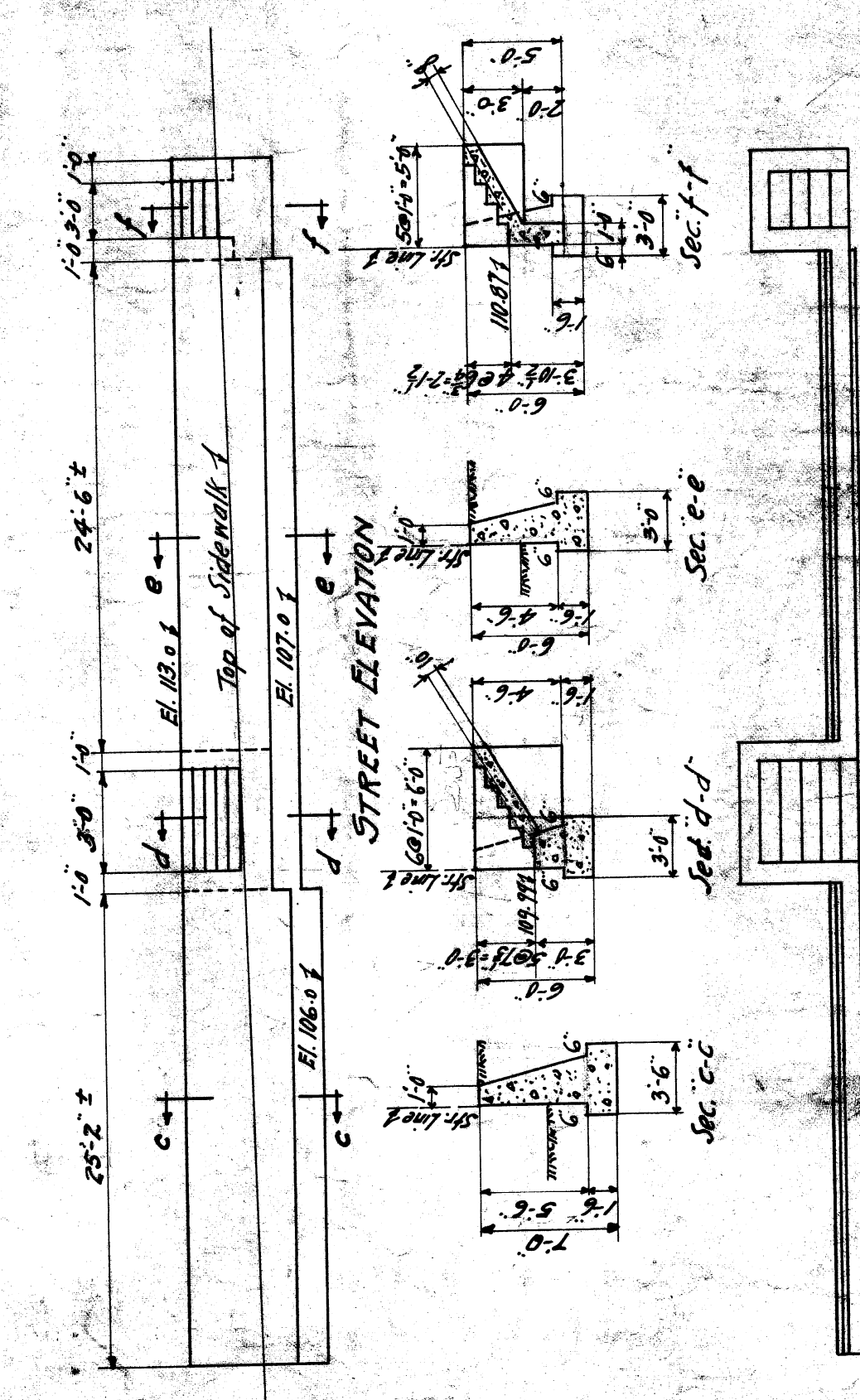
File X091-1

SHEET 1

ELEVATION OF EAST AND WEST ABUTMENT.
 East Abutment slightly different at South End (see Retaining Plan & Details)

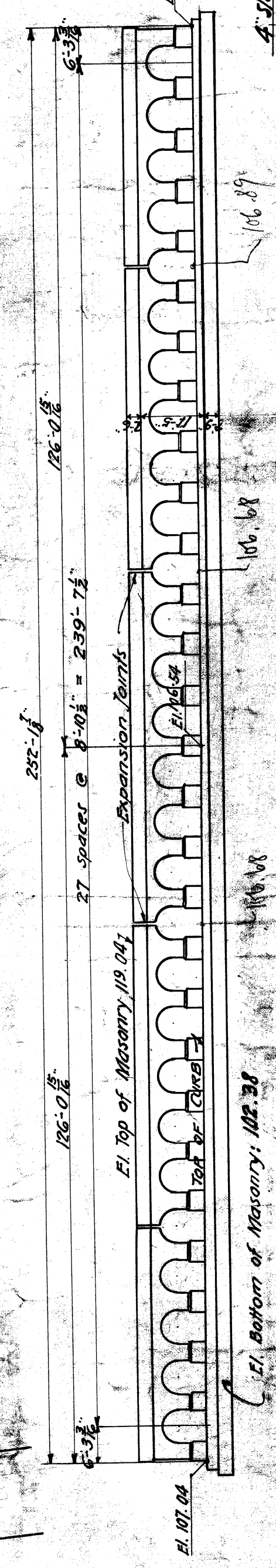


FOOTING PLAN.

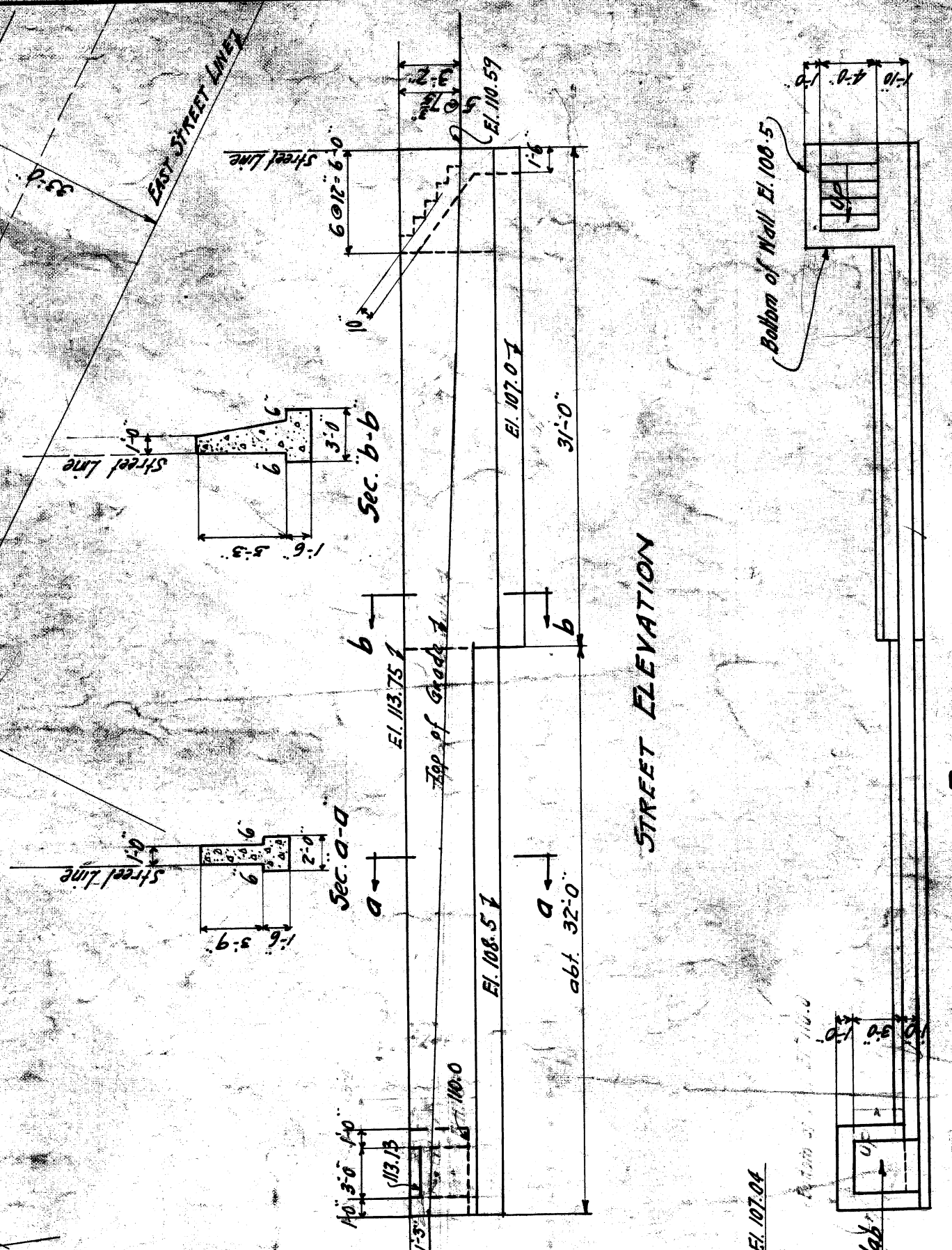


RETAINING WALL (C)

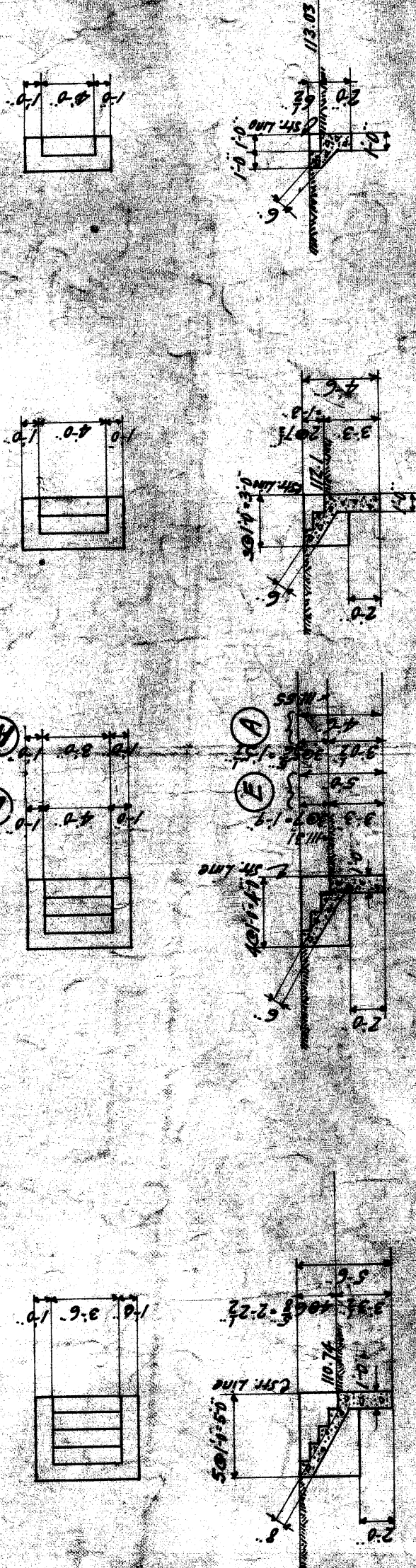
ELEVATION OF SIDEWALK AND ROADWAY PIERS.



RETAINING WALL (E)



RETAINING WALL (D)



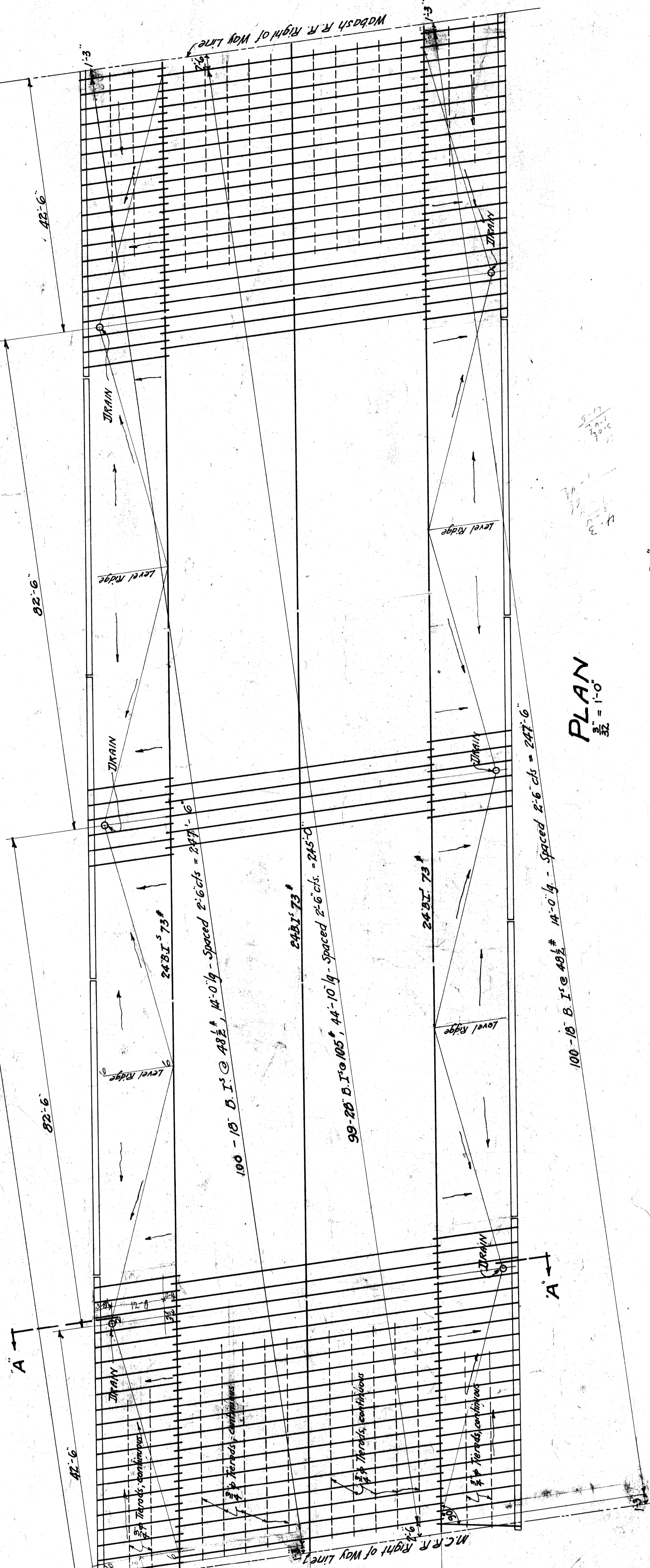
RETAINING WALL (E)

CITY OF DETROIT
 DEPARTMENT OF PUBLIC WORKS
 OFFICE OF CITY ENGINEER
 DIVISION OF GRADE SEPARATION & BRIDGES
MILITARY AVENUE SUBWAY
 UNDER
LS&M S.R.R. - M.C.S.R. - WABASH R.R.
MASONRY PLAN

GENERAL NOTES
 1. Refer to drawings with NYC lines.
 2. Location of Expansion Joints.
 3. Location of Expansion Joints.
 4. For drainage layout as constructed see Military Ave Drainage Plan.
 5. All masonry, steel-tipped, etc.
 6. Revised General Notes dated Mar 28, 1927.
 7. Such changes as may be required.

Checked by: R.S.
 Made by: R.S.
 Scale: 1/4" = 1'-0"
 SHEET 2

250'-0" between R. of W. Lines



PLAN
1/8" = 1'-0"

GENERAL NOTES:
 Etc. in accordance with N.Y.C. Lines specifications for Steel R.R. Bridges 1917 - Steel Beams carry full dead load + 68% of live load of 21.9 spans. Balance of LL carried by reinforced conc. beams between the steel beams. - for the sidewalk spans the proportions are 2/3 + 56% of LL for steel I and 44% of LL for the Reinforced Concrete Beams.
 Unit Stresses:
 Steel Beams: In accordance with N.Y.C. Lines spec. for Steel R.R. Bridges 1917.
 Reinforced Concrete Beams: Groups in compression: 650 $\frac{lb}{sq. in.}$
 Steel in Tension: 16,000 $\frac{lb}{sq. in.}$
 Reinforced Concrete Columns: Concrete in compression: 450 $\frac{lb}{sq. in.}$
 Concrete Mix: 1:2:4
 All reinforcing steel lapped 30 dia.

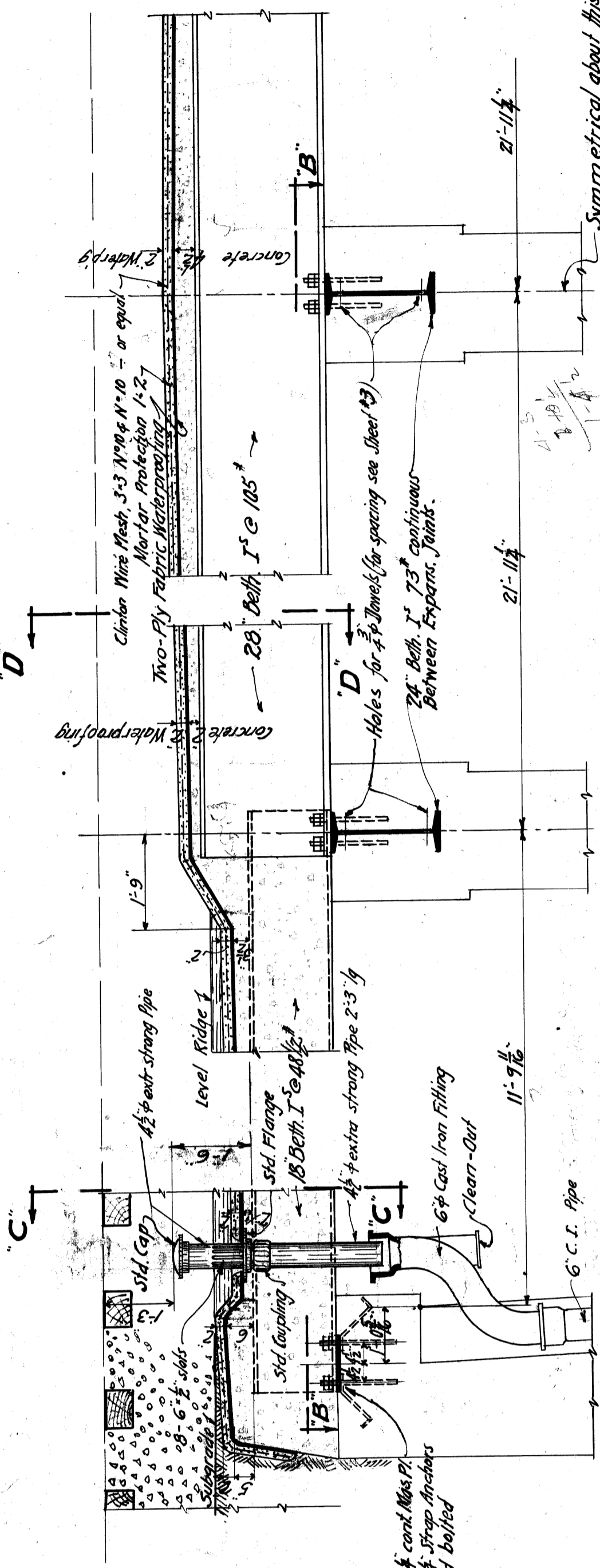
REVISIONS:
 General Notes added Mar 26th 1921

CITY OF DETROIT
 DEPARTMENT OF PUBLIC WORKS
 OFFICE OF CITY ENGINEER
 DIVISION OF GRADE SEPARATION & BRIDGES
MILITARY AVENUE SUBWAY
 UNDER
LS & M.S.R.R. - MCRR. - WABASH R.R.
SUPERSTRUCTURE

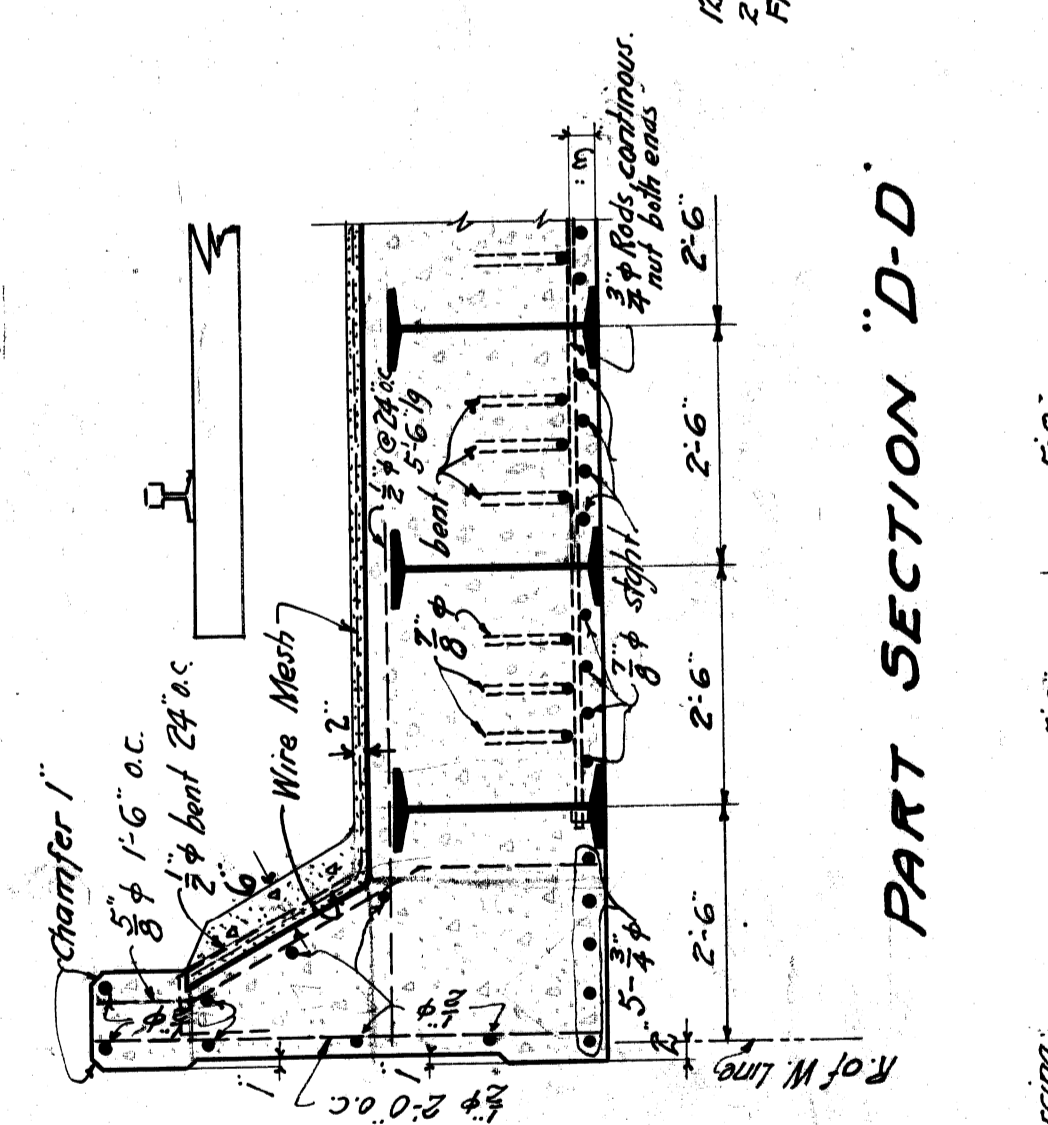
Scale: 1/4" = 1'-0" and as indicated
 Made by: R.S.
 Checked: R.S.
 March 25th 1921
 Revised June 30th 1921
 Revised Nov. 10, 1921

File XBR-5

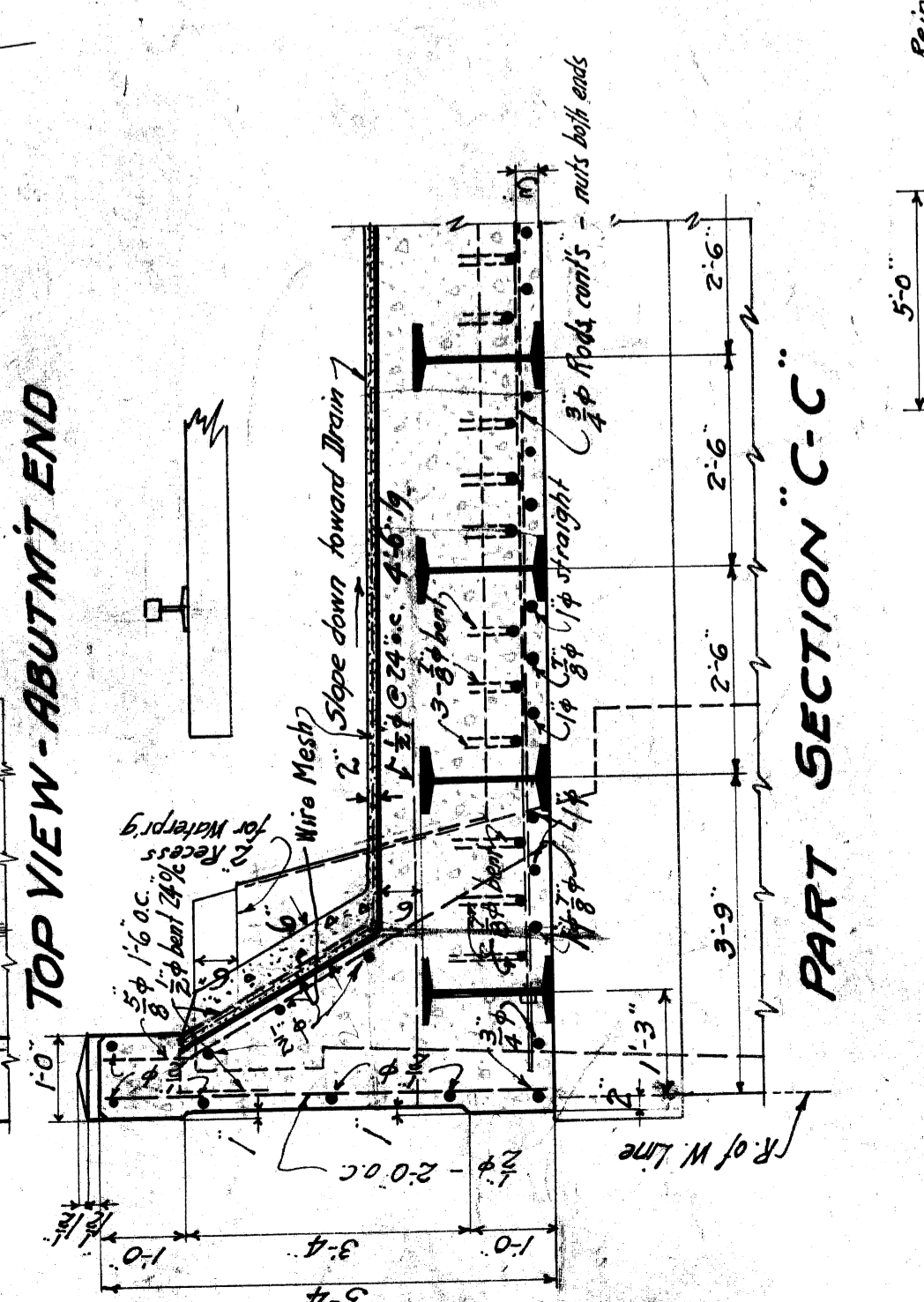
Sheet 4



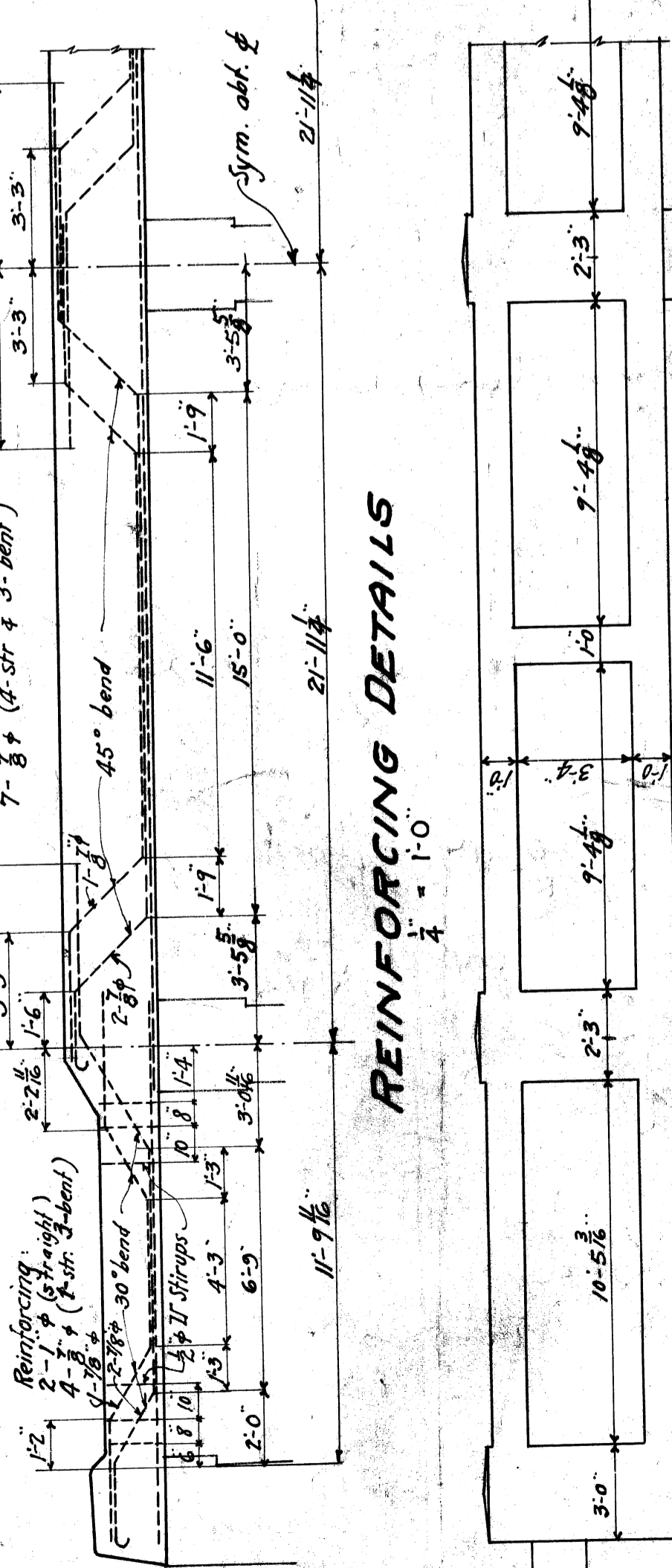
HALF SECTION "A-A"



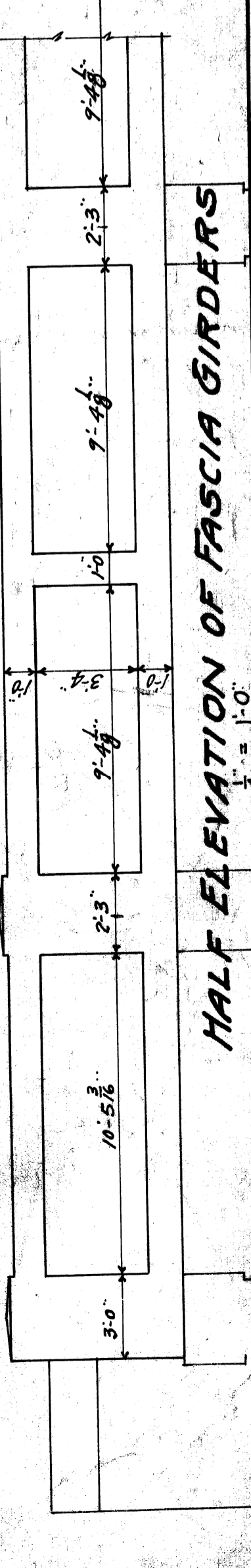
PART SECTION "D-D"



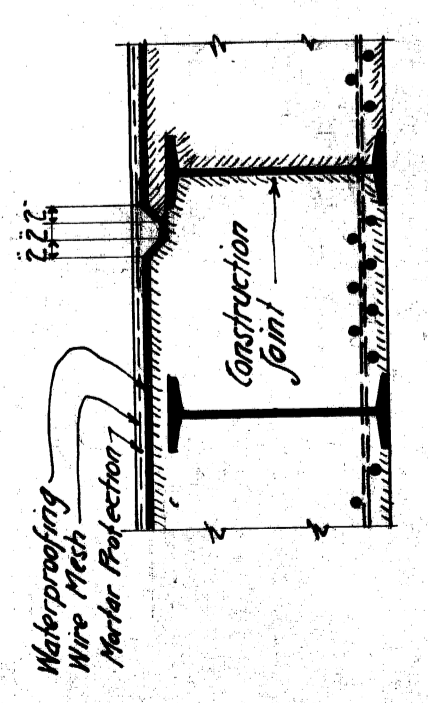
PART SECTION "C-C"



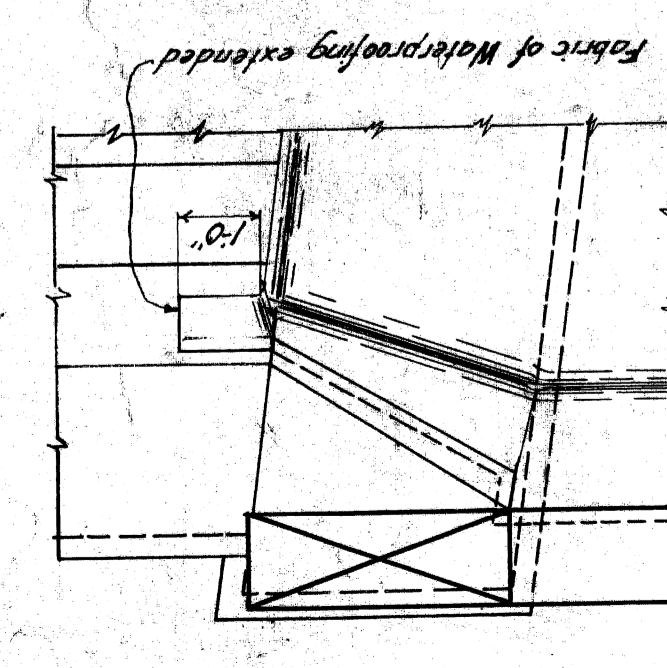
REINFORCING DETAILS
1/4" = 1'-0"



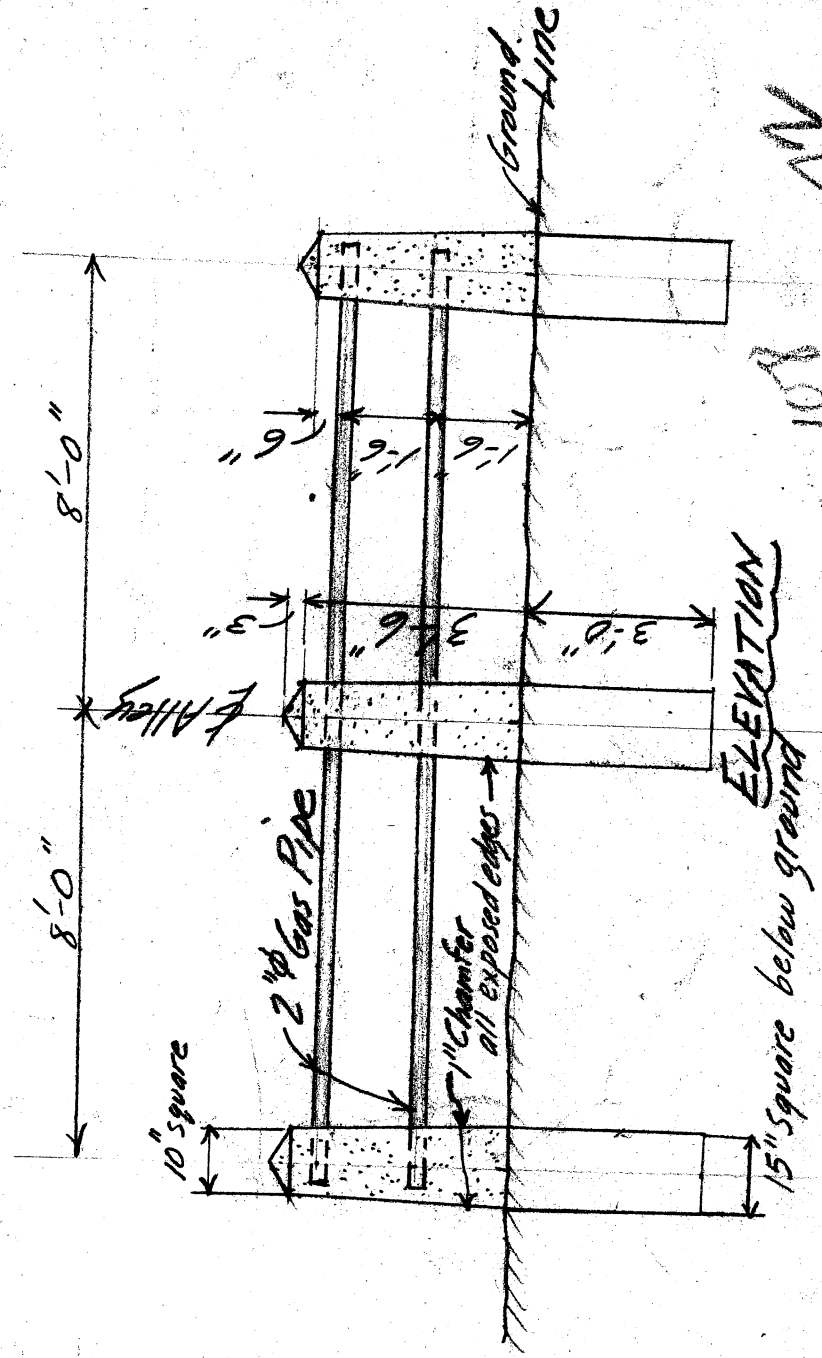
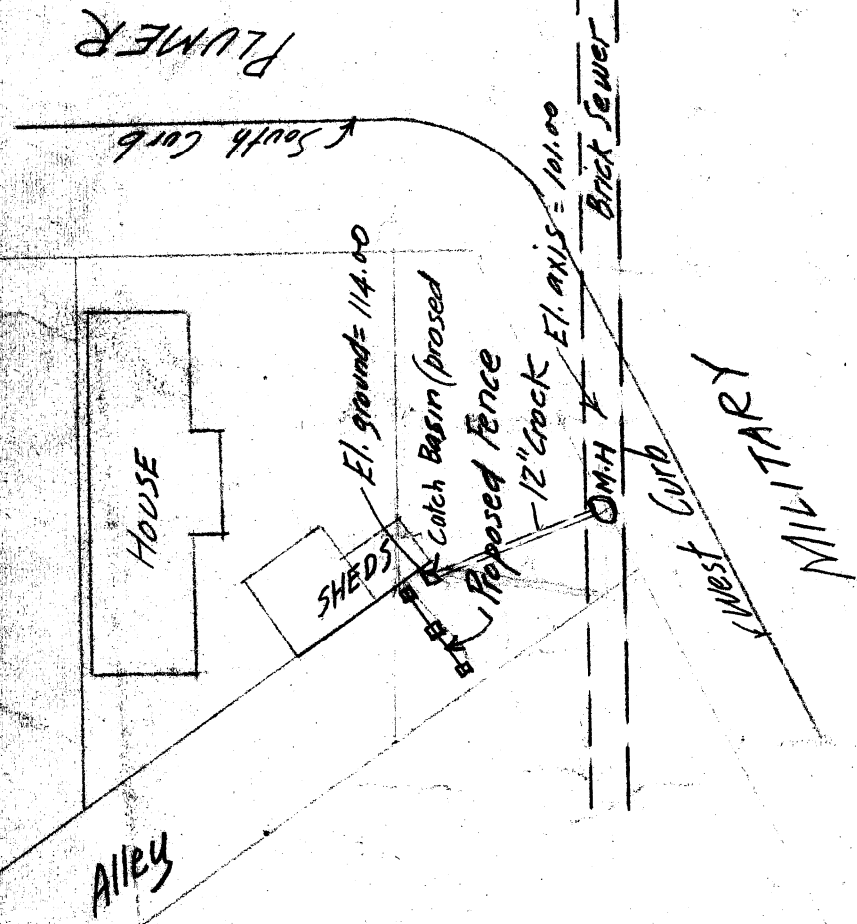
HALF ELEVATION OF FASCIA GIRDERS
1/4" = 1'-0"



DETAIL SHOWING WATERPROOFING OF DECK CONSTRUCTION JOINTS.



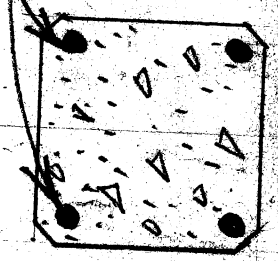
TOP VIEW - ABUTMENT END



108 3/4

3/4" x 6'-0" rods

N



File 31-6

AUG. 23-22.

SKETCH OF
Guard Fence
for Alley
Military Ave. Subway
OFFICE ENGINEER JOHN ENGER

AMERICAN CONST. CO.				JOHN F. CASEY CO.				A.W. KUTCHE CO.				PONTIAC CONST. CO.				CANDLER DOCK & DREDGE			
PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT		
Cts	\$	Cts	\$	Cts	\$	Cts	\$	Cts	\$	Cts	\$	Cts	\$	Cts	\$	Cts	\$		
1740	1732800	1175	1786000	1260	1915200	1162	1766240	1800	2736000										
1530	4666500	1700	5185000	1720	5246000	1830	5581500	2472	7539600										
04	1143200	04	1262300	033	3966900	037	1126123	053	1571900										
047	3112340	04	2648800	003	2185260	037	2502454	042	2814350										
10	138000	08	1104000	008	135240	012	112070	023	86250										
19	356250	34	637500	39	731250	38	712500	21	393750										
065	40950	05	31500	05	34650	035	34650	015	48825										
130	187850	120	173400	290	419050	173	249985	340	491300										
190000	190000200000	200000	200000	204150	204150	159976	159976	407500	407500										
92500	92500130000	130000	130000	12230	12230	178163	178163	435000	435000										
570	584250	490	502250	594	608850	484	496100	667	683675										
32	96768	25	75600	24	72576	26	78624	35	105840										
	12341408		12880150		12533246		13100076		17313990										

PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT
Cts	\$	Cts	\$	Cts	\$	Cts	\$	Cts	\$
145	17020	120	19120	345	26220	173	13148	292	22192
150	352500	90	211500	110	258500	102	239700	216	507600
165	61050	155	57350	220	81400	89	32930	195	72150
225	27000	200	24000	275	33000	99	11880	210	25200
570	684250	490	502250	594	608850	484	496100	667	683675
52	93120	25	72750	25	72750	26	75660	36	104760
1140	11400	1200	12000	1460	14600	1162	11620	2000	20000
1900	39900	2000	42000	2360	49560	2734	57414	2500	52500
	1180240		930970		1144880		938452		1488077

PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT
Cts	\$	Cts	\$	Cts	\$	Cts	\$	Cts	\$
145	5800	120	4800	334	13360	173	6920	292	11680
150	310800	90	186480	110	227920	102	211344	216	447552
165	74250	155	69750	220	99000	89	40050	195	87750
225	18000	200	16000	295	23600	99	7920	210	16800
570	652700	490	543900	594	659340	484	537240	667	740370
52	99840	25	78000	25	78000	26	81120	36	112320
1140	10260	1200	10800	1594	14346	1162	10458	2000	18000
1900	47500	2000	50000	2390	59750	2829	70725	2500	62500
	1199150		959730		1175316		965777		1496972
	14720788		14770850		14853442		15004305		20299039

CANVAS OF BIDS FOR MILITARY AVE. SUBWAY & APPROACHES - OCTOBER 21st, 1921.

NAMES OF BIDDERS

ITEM No.	DESCRIPTION	FRANK H. DAVIS Co.		JOHN BOLLIN Co.		R. H. HIDEY		WORSWICH BROS.		WALBRIDGE-ALDINGER		GASS-THURSTON Co.		NORTH AMER. Ry CONST.		BRAYTON ENG. Co.			
		PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT
		Cts.	\$	Cts.	\$	Cts.	\$	Cts.	\$	Cts.	\$	Cts.	\$	Cts.	\$	Cts.	\$	Cts.	\$
1	CONCRETE ABUTMENT & PIER FOOTINGS	1/30	141,516.00	1/45	143,640.00	9/85	149,720.00	1/480	224,760.00	1/64	170,928.00	1/191	169,680.00	1/100	181,052.00	1/110	167,200.00		
2	CONCRETE ABUTMENTS, PIERS & BRIDGE DECK	1/150	350,750.00	1/300	396,000.00	1/350	417,500.00	1/480	451,400.00	1/566	477,630.00	1/582	434,625.00	1/600	488,000.00	1/600	488,000.00		
3	REINFORCING STEEL $\frac{3}{4}$ "	1/825	78,575.00	1/825	78,575.00	1/825	78,575.00	1/825	78,575.00	1/825	78,575.00	1/825	78,575.00	1/825	78,575.00	1/825	78,575.00		
4	STRUCTURAL STEEL	1/825	98,660.00	1/825	98,660.00	1/825	98,660.00	1/825	98,660.00	1/825	98,660.00	1/825	98,660.00	1/825	98,660.00	1/825	98,660.00		
5	STRUCTURAL IRON	1/111	157,800.00	1/111	157,800.00	1/111	157,800.00	1/111	157,800.00	1/111	157,800.00	1/111	157,800.00	1/111	157,800.00	1/111	157,800.00		
6	FABRIC WATERPROOFING	1/71	5,197.50	1/71	5,197.50	1/71	5,197.50	1/71	5,197.50	1/71	5,197.50	1/71	5,197.50	1/71	5,197.50	1/71	5,197.50		
7	DRY EXCAVATION FOR FOOTING	1/15	31,067.50	1/15	31,067.50	1/15	31,067.50	1/15	31,067.50	1/15	31,067.50	1/15	31,067.50	1/15	31,067.50	1/15	31,067.50		
8	STREET DRAINAGE SYSTEM LUMP SUM	1/80	120,725.00	1/80	120,725.00	1/80	120,725.00	1/80	120,725.00	1/80	120,725.00	1/80	120,725.00	1/80	120,725.00	1/80	120,725.00		
9	DRAINAGE SYSTEM (BRIDGE) LUMP SUM	1/80	29,300.00	1/80	29,300.00	1/80	29,300.00	1/80	29,300.00	1/80	29,300.00	1/80	29,300.00	1/80	29,300.00	1/80	29,300.00		
10	PAVING	1/88	50,020.00	1/88	50,020.00	1/88	50,020.00	1/88	50,020.00	1/88	50,020.00	1/88	50,020.00	1/88	50,020.00	1/88	50,020.00		
11	CONCRETE SIDEWALKS	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00		
TOTAL AMOUNT			91,597.50		102,817.81		103,746.73		109,908.94		114,467.25		117,435.55		119,698.43		118,657.74		

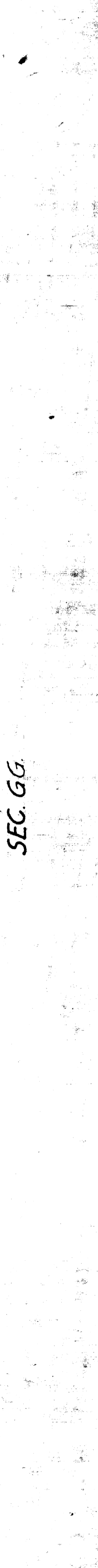
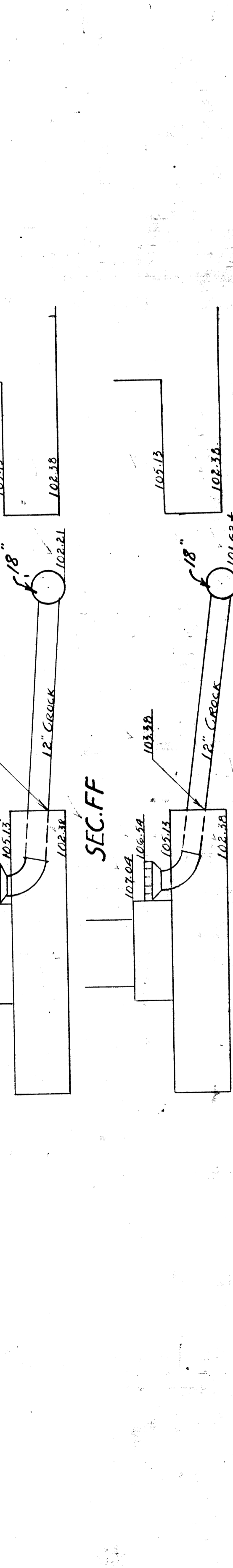
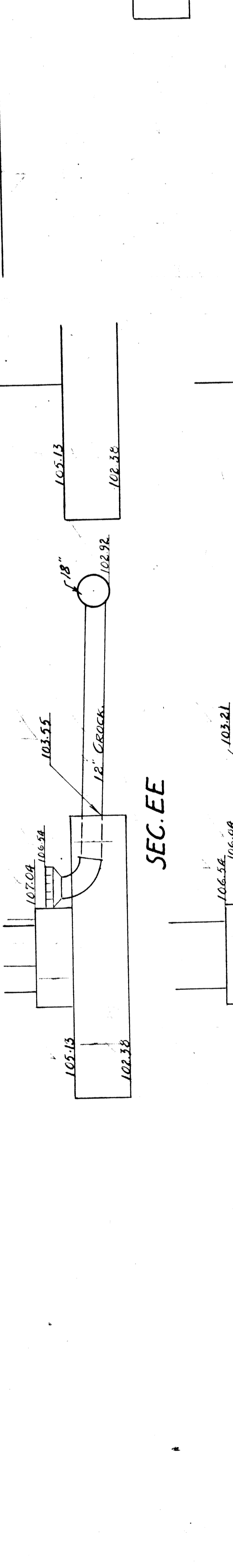
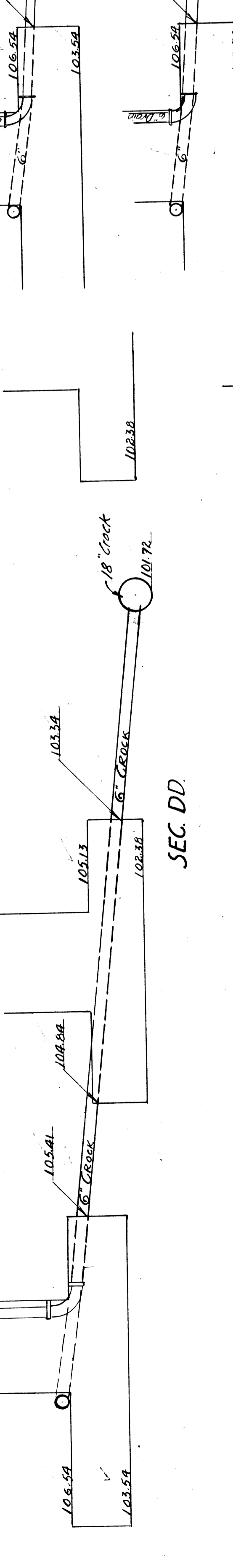
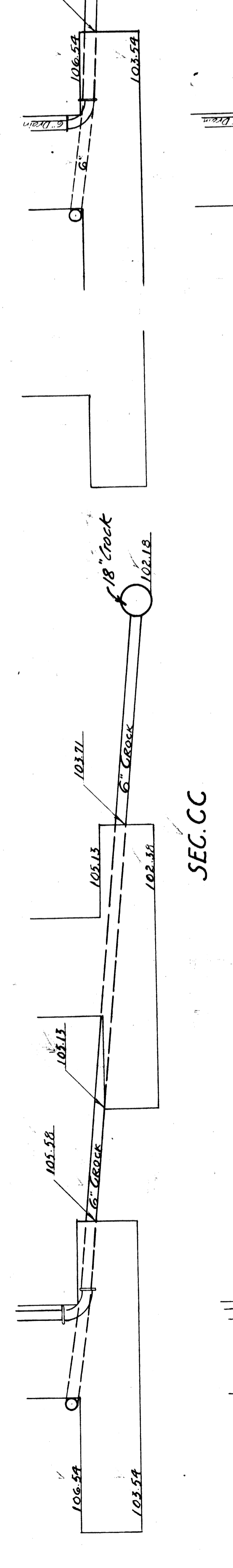
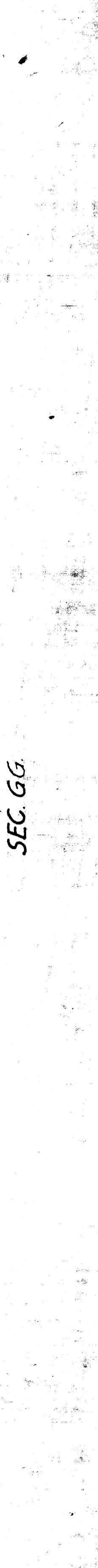
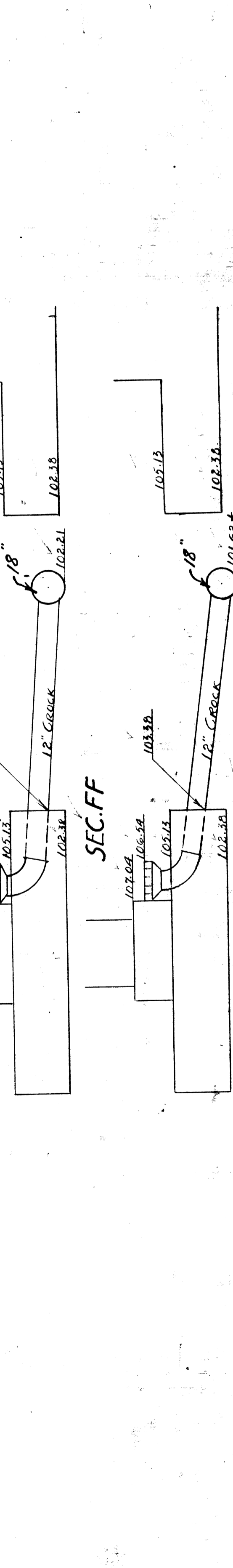
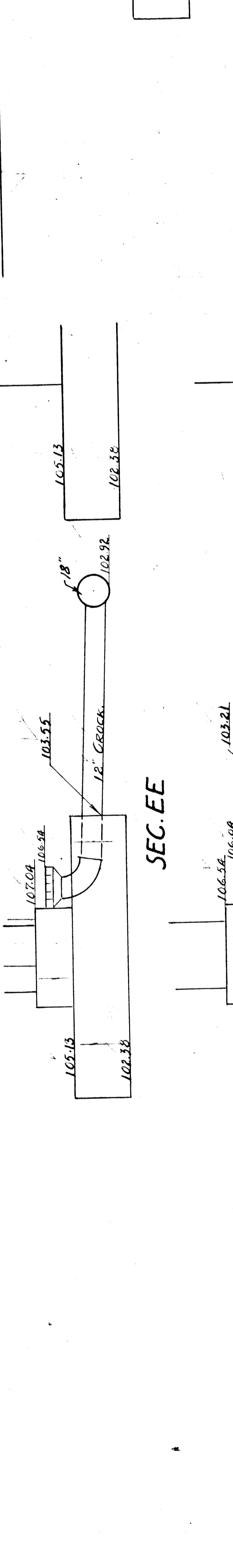
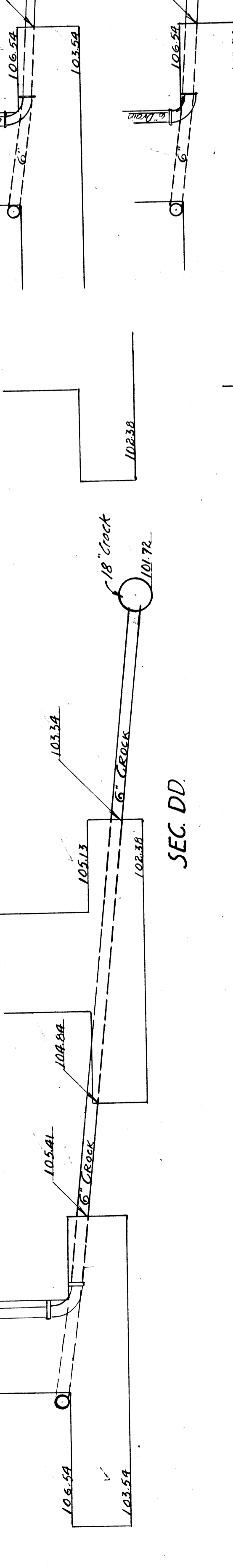
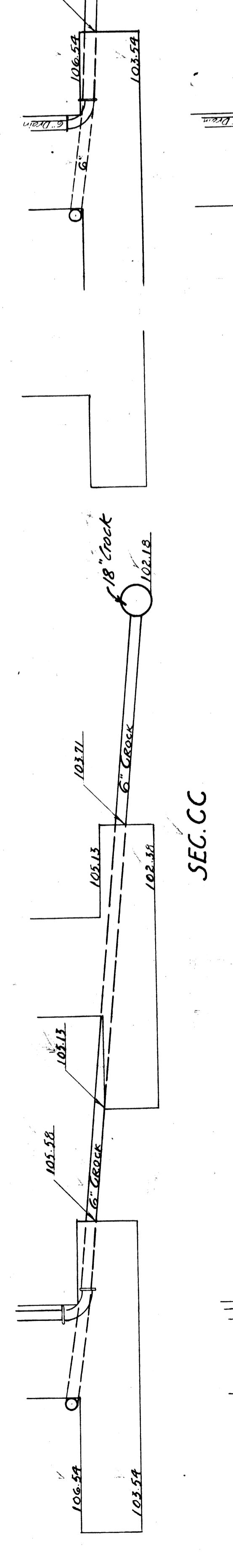
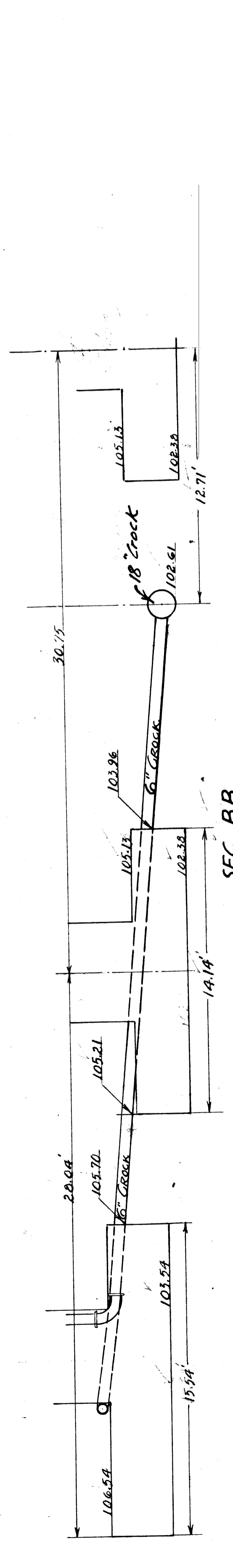
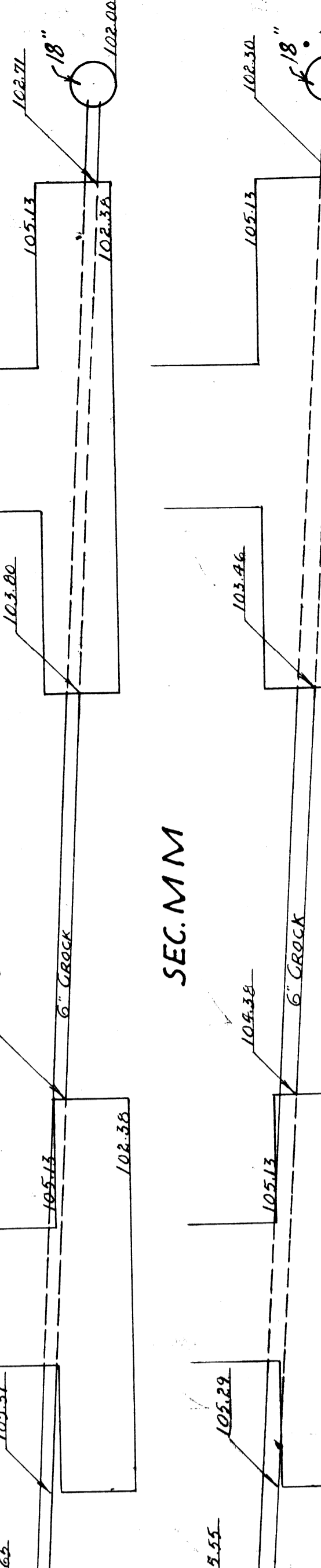
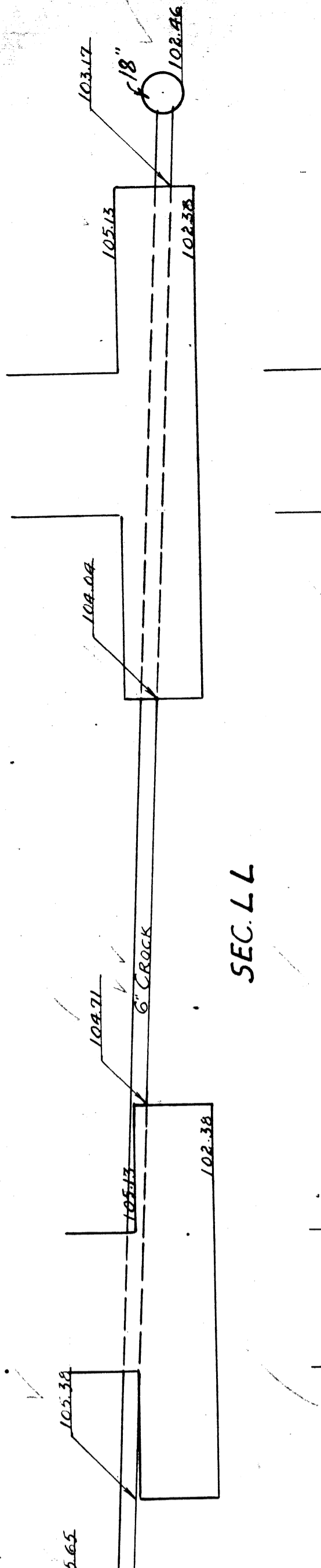
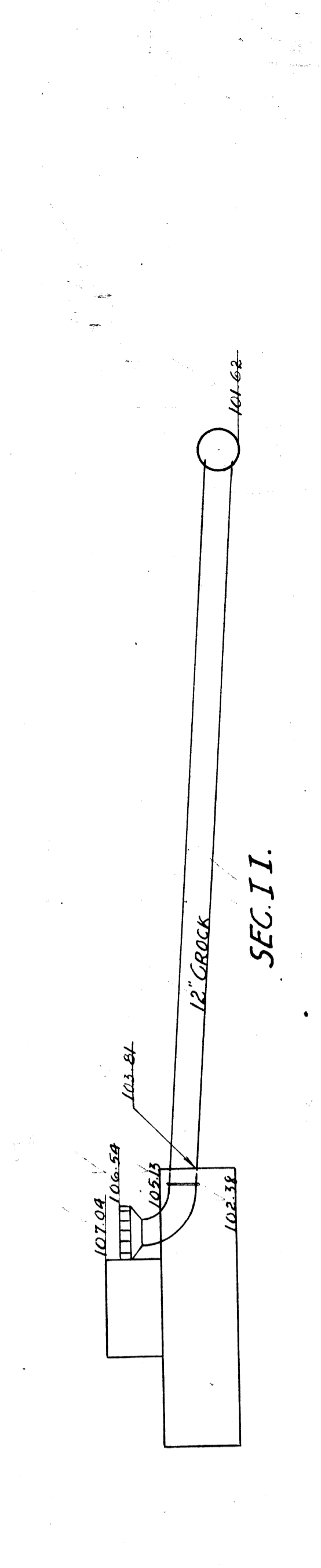
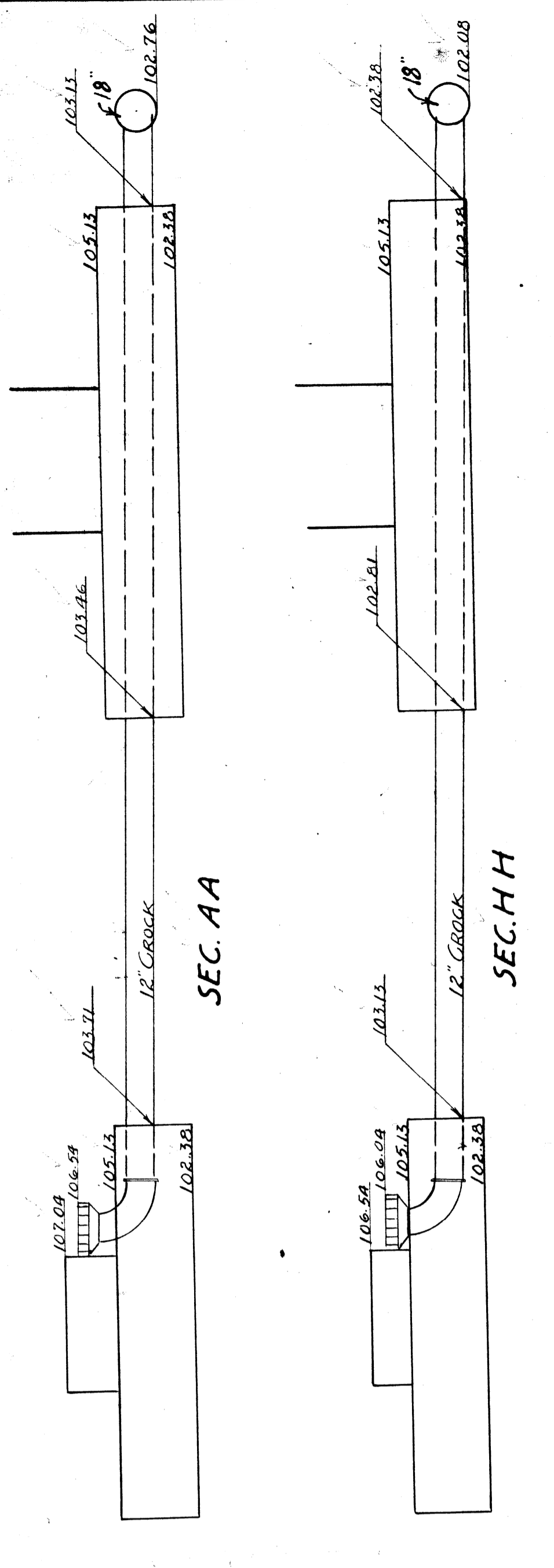
NAMES OF BIDDERS

ITEM No.	DESCRIPTION	FRANK H. DAVIS Co.		JOHN BOLLIN Co.		R. H. HIDEY		WORSWICH BROS.		WALBRIDGE-ALDINGER		GASS-THURSTON Co.		NORTH AMER. Ry CONST.		BRAYTON ENG. Co.			
		PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT
		Cts.	\$	Cts.	\$	Cts.	\$	Cts.	\$	Cts.	\$	Cts.	\$	Cts.	\$	Cts.	\$	Cts.	\$
1	EXCAVATION FOR CURBING & WALL FOOTINGS	1/15	163,410.00	1/15	163,410.00	1/15	163,410.00	1/15	163,410.00	1/15	163,410.00	1/15	163,410.00	1/15	163,410.00	1/15	163,410.00		
2	EXCAVATION APPROACH GRADE	1/15	21,737.50	1/15	21,737.50	1/15	21,737.50	1/15	21,737.50	1/15	21,737.50	1/15	21,737.50	1/15	21,737.50	1/15	21,737.50		
3	CURBING STRAIGHT	1/70	162,900.00	1/70	162,900.00	1/70	162,900.00	1/70	162,900.00	1/70	162,900.00	1/70	162,900.00	1/70	162,900.00	1/70	162,900.00		
4	CURBING CIRCLES	1/21	162,900.00	1/21	162,900.00	1/21	162,900.00	1/21	162,900.00	1/21	162,900.00	1/21	162,900.00	1/21	162,900.00	1/21	162,900.00		
5	CONCRETE SIDEWALKS	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00		
6	CONCRETE RETAINING WALL FOOTINGS	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00		
7	CONCRETE RETAINING WALLS & STAIRWAYS	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00		
TOTAL AMOUNT			91,597.50		102,817.81		103,746.73		109,908.94		114,467.25		117,435.55		119,698.43		118,657.74		

NAMES OF BIDDERS

ITEM No.	DESCRIPTION	FRANK H. DAVIS Co.		JOHN BOLLIN Co.		R. H. HIDEY		WORSWICH BROS.		WALBRIDGE-ALDINGER		GASS-THURSTON Co.		NORTH AMER. Ry CONST.		BRAYTON ENG. Co.			
		PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT	PRICE	AMOUNT
		Cts.	\$	Cts.	\$	Cts.	\$	Cts.	\$	Cts.	\$	Cts.	\$	Cts.	\$	Cts.	\$	Cts.	\$
1	EXCAVATION FOR CURBING & WALL FOOTINGS	1/15	163,410.00	1/15	163,410.00	1/15	163,410.00	1/15	163,410.00	1/15	163,410.00	1/15	163,410.00	1/15	163,410.00	1/15	163,410.00		
2	EXCAVATION APPROACH GRADE	1/15	21,737.50	1/15	21,737.50	1/15	21,737.50	1/15	21,737.50	1/15	21,737.50	1/15	21,737.50	1/15	21,737.50	1/15	21,737.50		
3	CURBING STRAIGHT	1/70	162,900.00	1/70	162,900.00	1/70	162,900.00	1/70	162,900.00	1/70	162,900.00	1/70	162,900.00	1/70	162,900.00	1/70	162,900.00		
4	CURBING CIRCLES	1/21	162,900.00	1/21	162,900.00	1/21	162,900.00	1/21	162,900.00	1/21	162,900.00	1/21	162,900.00	1/21	162,900.00	1/21	162,900.00		
5	CONCRETE SIDEWALKS	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00		
6	CONCRETE RETAINING WALL FOOTINGS	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00		
7	CONCRETE RETAINING WALLS & STAIRWAYS	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00	1/21	63,504.00		
TOTAL AMOUNT			91,597.50		102,817.81		103,746.73		109,908.94		114,467.25		117,435.55		119,698.43		118,657.74		

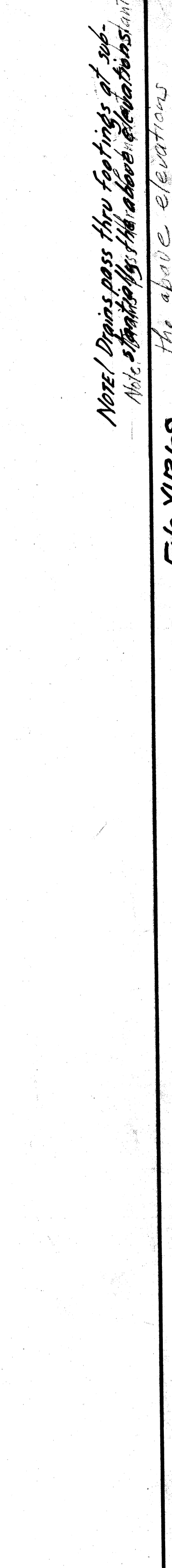
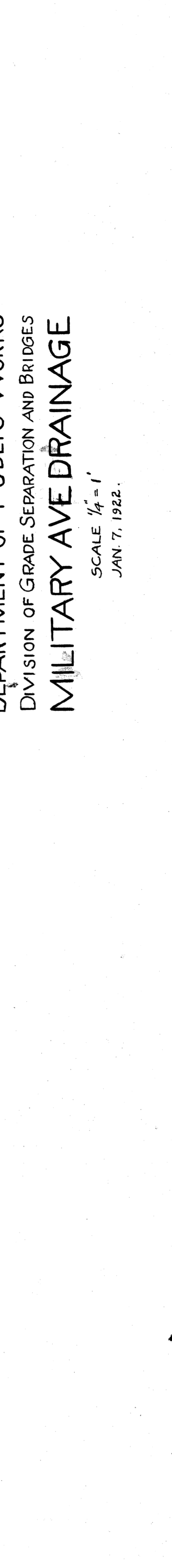
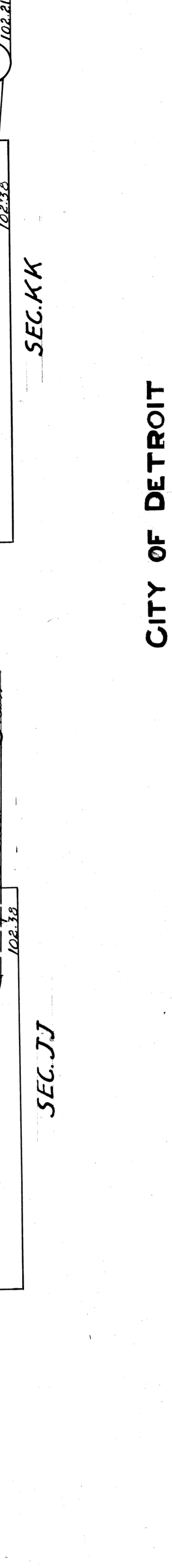
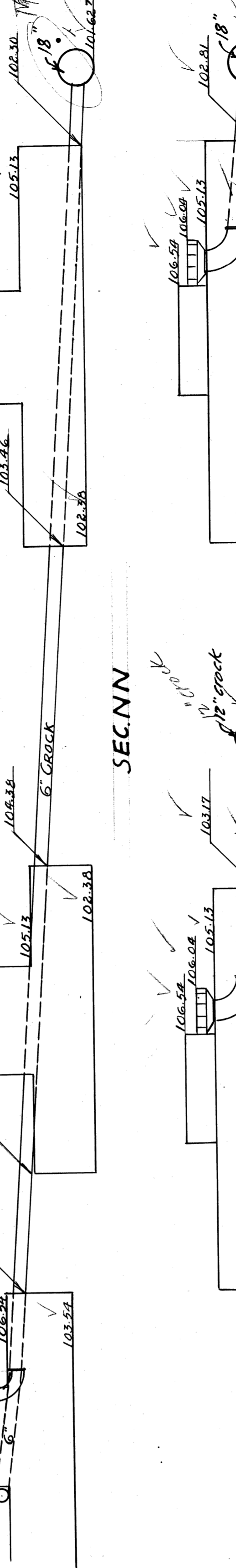
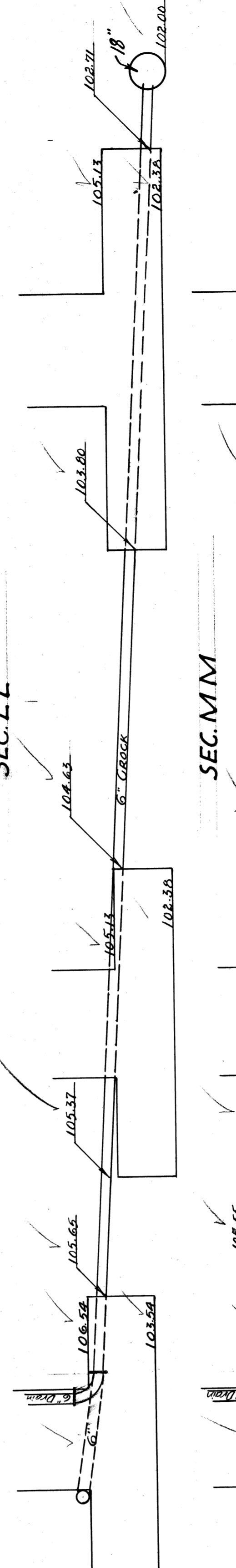
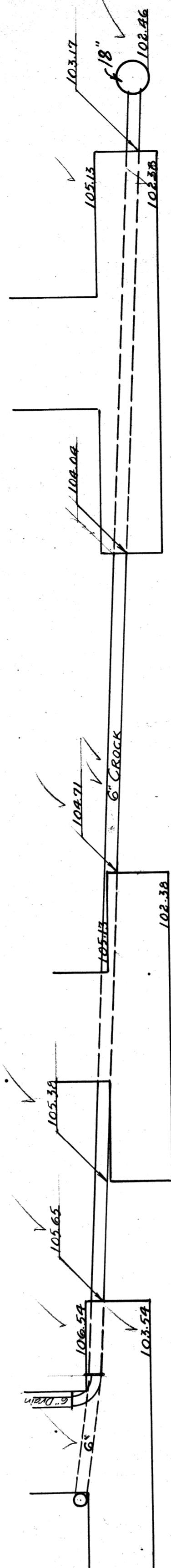
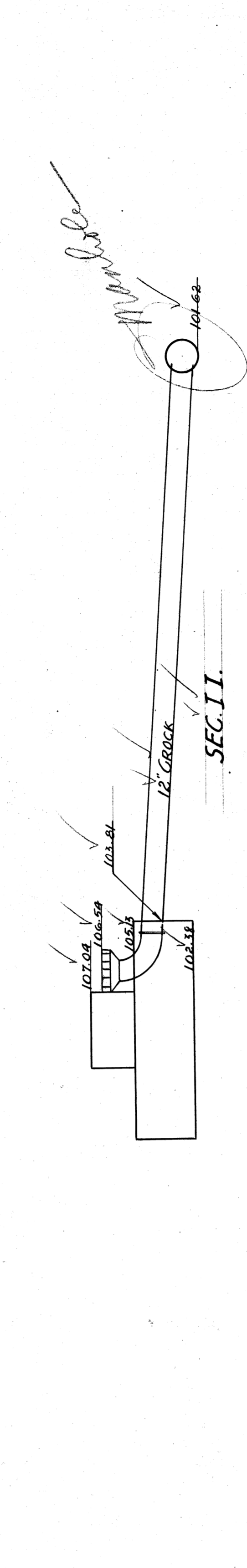
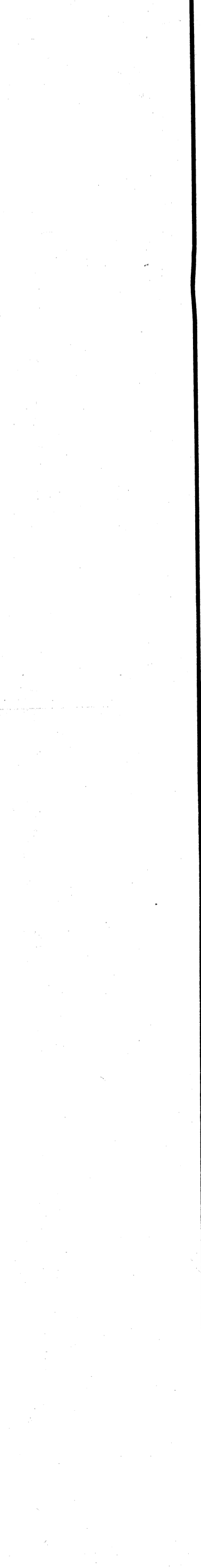
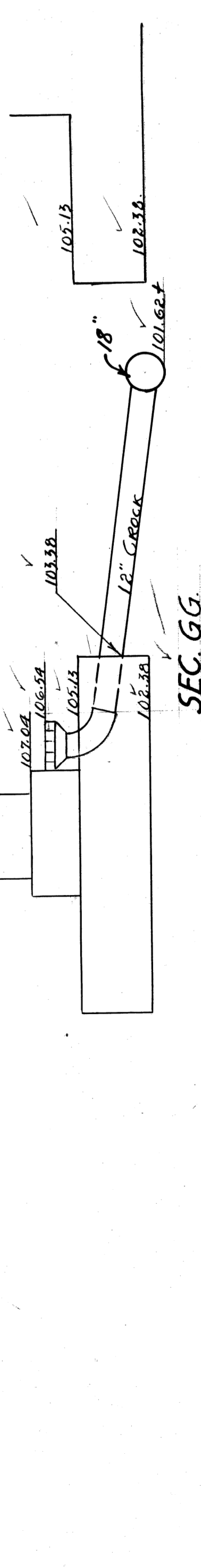
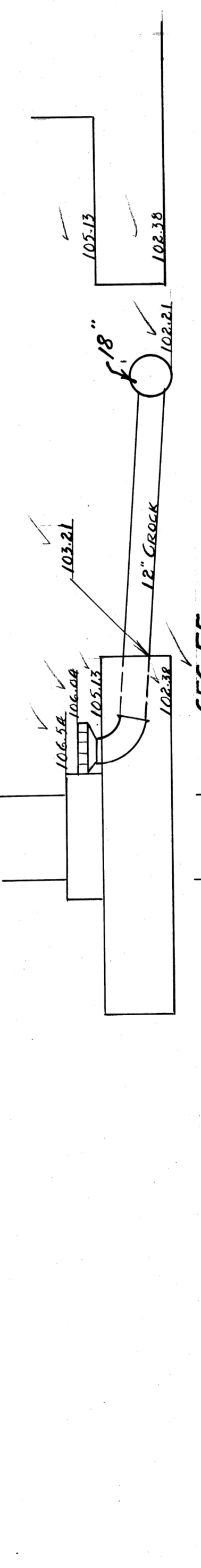
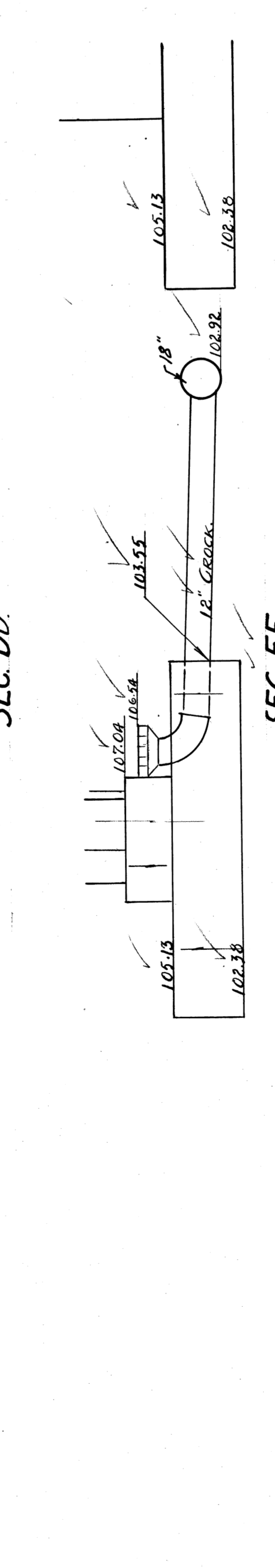
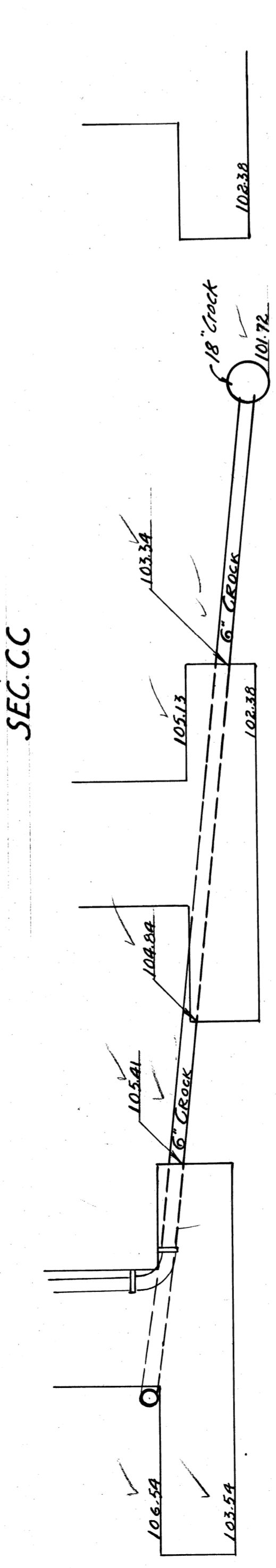
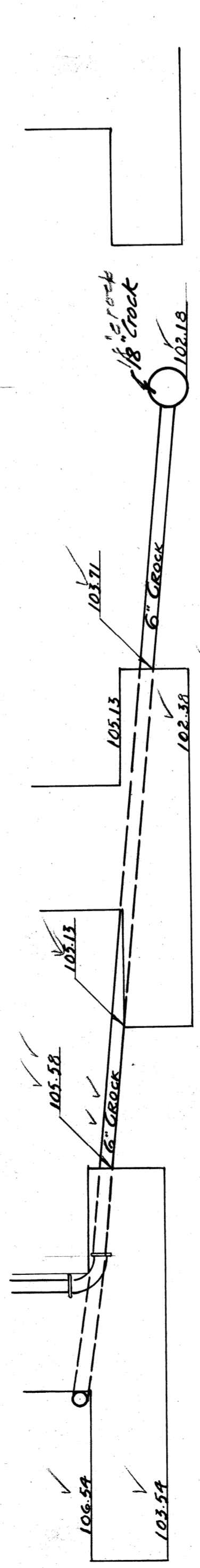
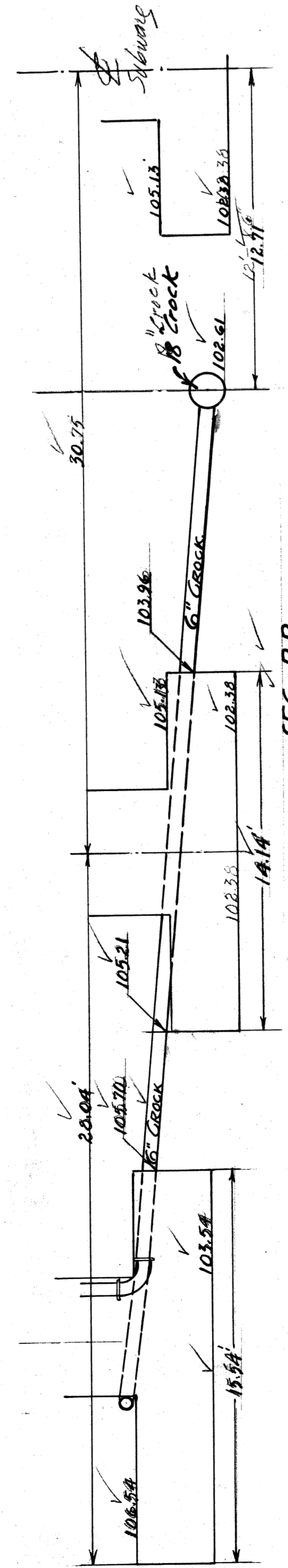
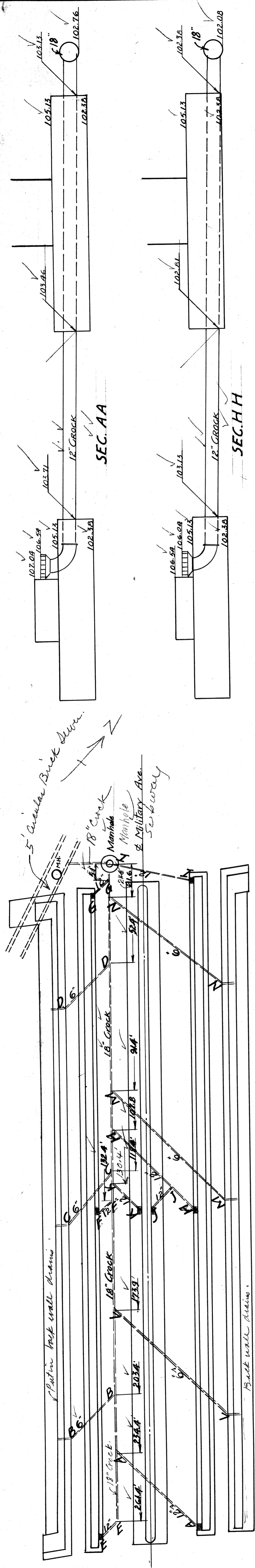
GRAND TOTAL FOR GROUPS 'A', 'B' & 'C'.



CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
DIVISION OF GRADE SEPARATION AND BRIDGES
MILITARY AVE DRAINAGE

SCALE 1/4" = 1'
JAN 7, 1922.

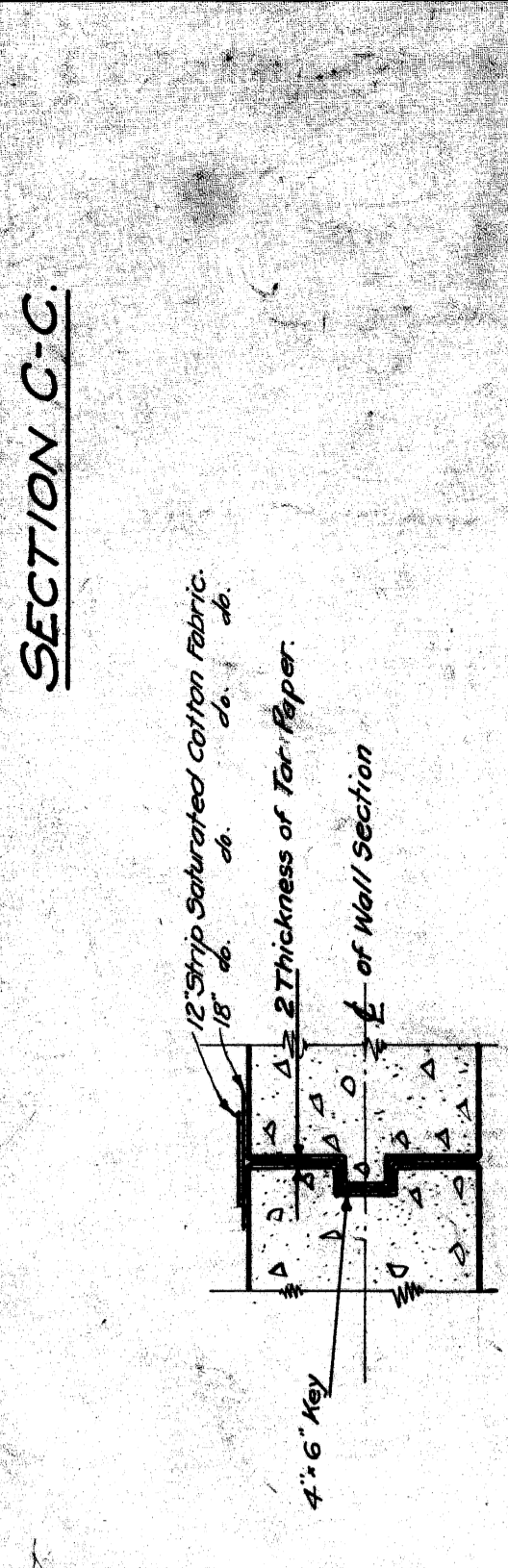
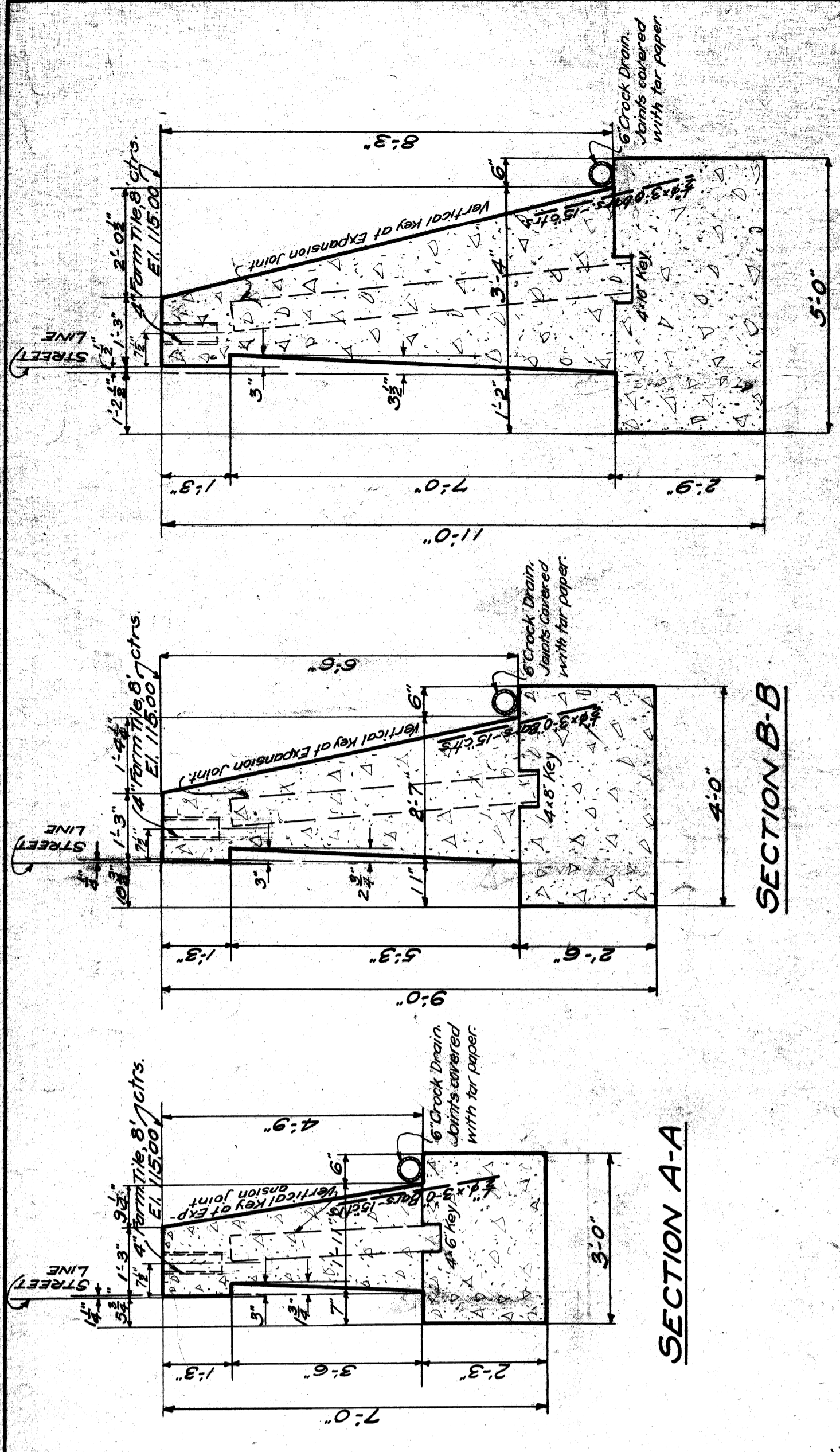
Note: Drawings show footings of manholes shown in the above drawings.



CITY OF DETROIT
 DEPARTMENT OF PUBLIC WORKS
 DIVISION OF GRADE SEPARATION AND BRIDGES
 MILITARY AVE DRAINAGE

SCALE 1/4" = 1'
 JAN 7, 1922.

NOTE: Drains pass thru openings of sub-
 sidence pipe. The above elevations are
 the above elevations

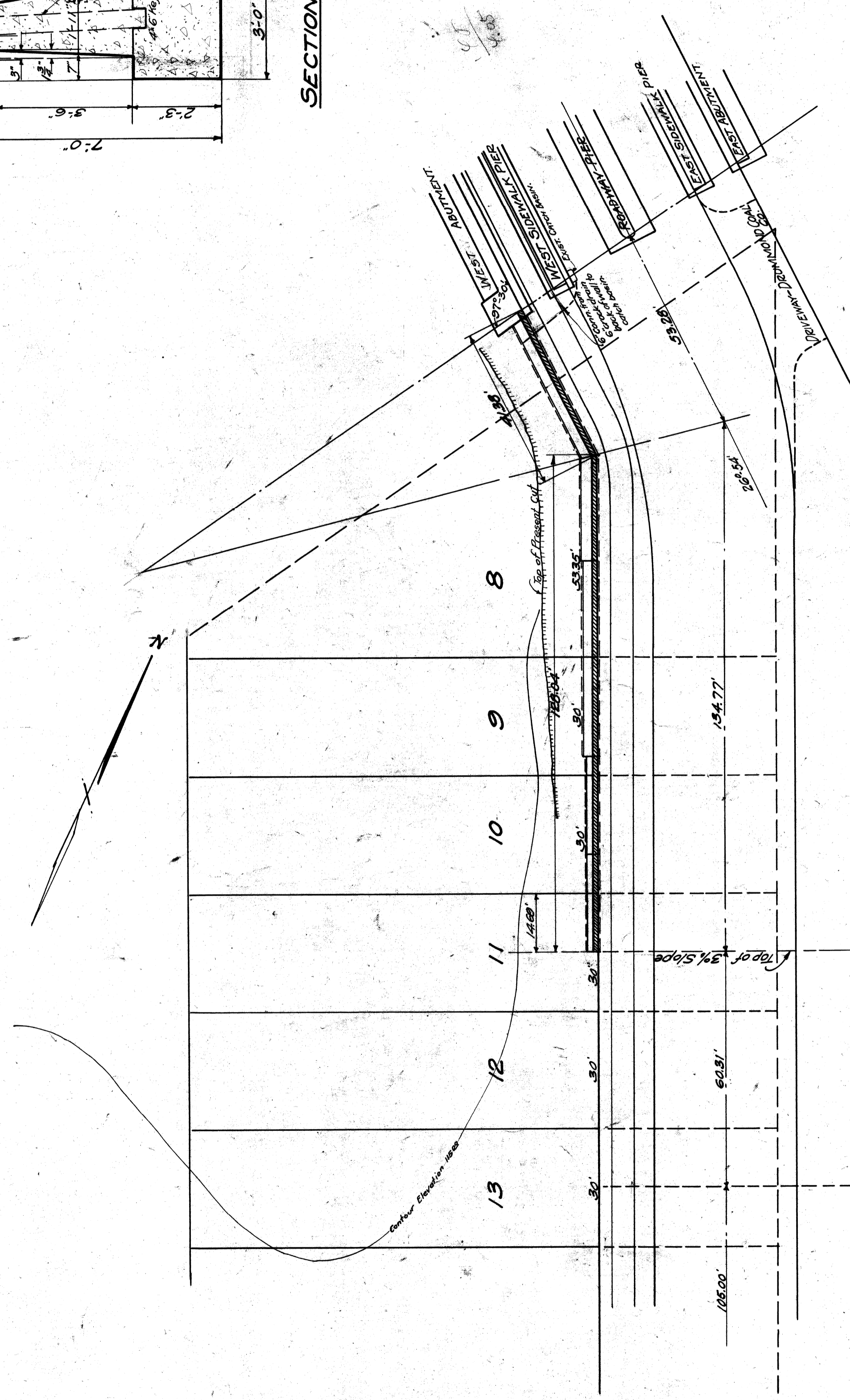


SECTION D-D
TYPICAL SECTION FOR VERTICAL KEYS AT EXP. JNCS

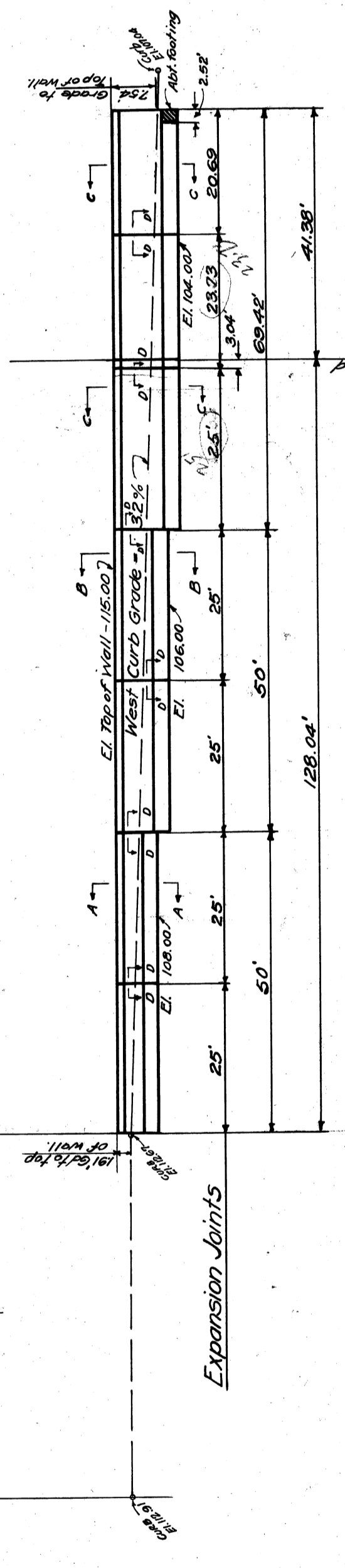
CONTENTS

Concrete in footings 65.0 Cu. Yds.
 Concrete above footings 82.5
 190 Total 147.5
 190 - 6" Crack Drain
 22 pcs. 4" x 1/2" Formite for Railing Posts.
 136 - 3/4" x 3'-0" bars - 275#

Note: -
 Concrete, 1:2:4 mix.
 Water-proofing, 2 coats Karnak applied
 hot on exterior surface.
 At section joints a strip of thorough-sol
 oiled cotton fabric 12" wide is to be laid over joint while
 the second coat of Karnak is hot and a coat of Karnak
 applied over such 12" strip after which an 18" strip
 is to be applied and another coat of Karnak



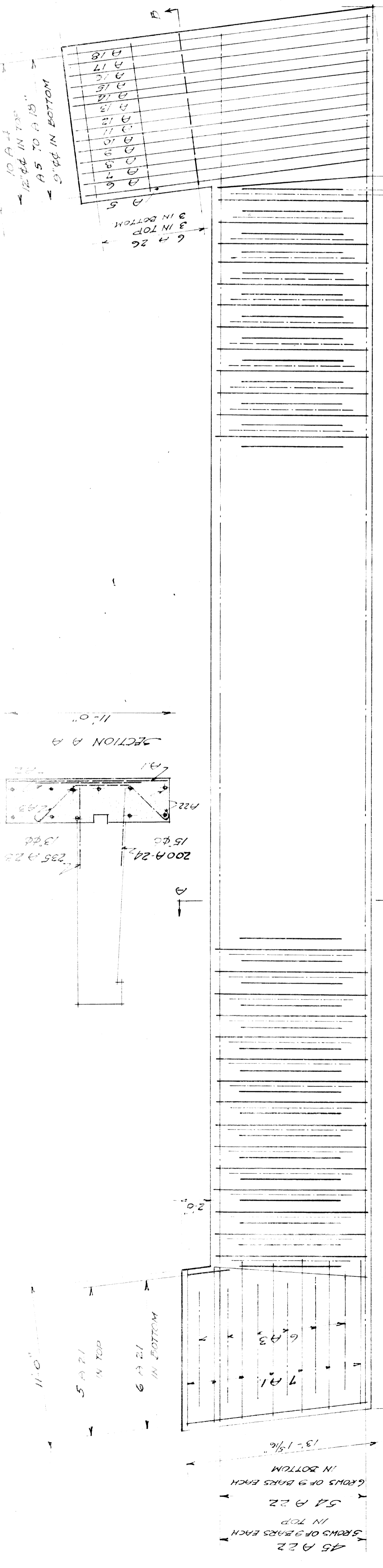
STREET PLAN SHOWING LOCATION OF WALL
SCALE 1"=20'



PROFILE OF RETAINING WALL
SCALE 1"=20'

CITY OF DETROIT
 DEPARTMENT OF PUBLIC WORKS
 OFFICE OF CITY ENGINEER
 DIVISION OF GRADE SEPARATION & BRIDGES
RETAINING WALL
 UNITED FUEL & SUPPLY COMPANY
 ALONG MILITARY AVE

MADE BY
 SCALE 1/8" = 1'-0"
 JUNE, 1922



156 A 3 18' 4"

156 A 2 18' 4"

157 A 1 18' 4"

257-2 3/8"

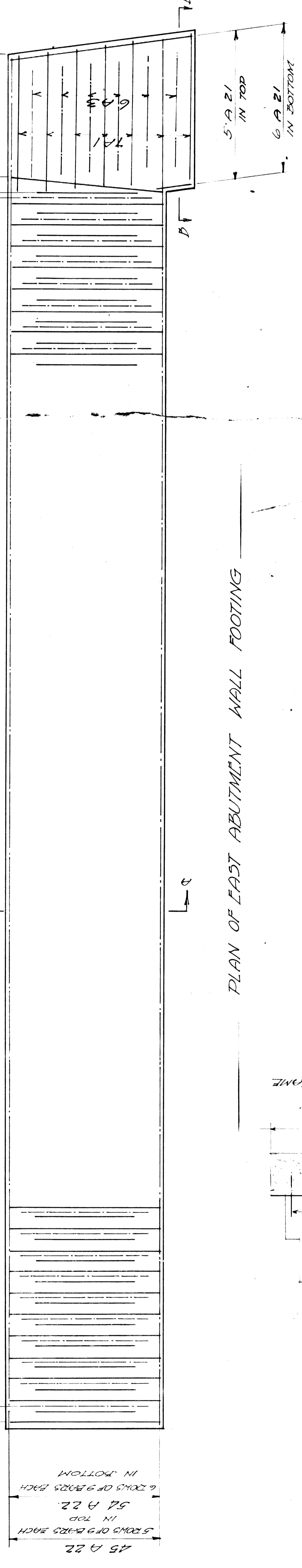
PLAN OF WEST ABUTMENT WALL FOOTING

258-2 11/16"

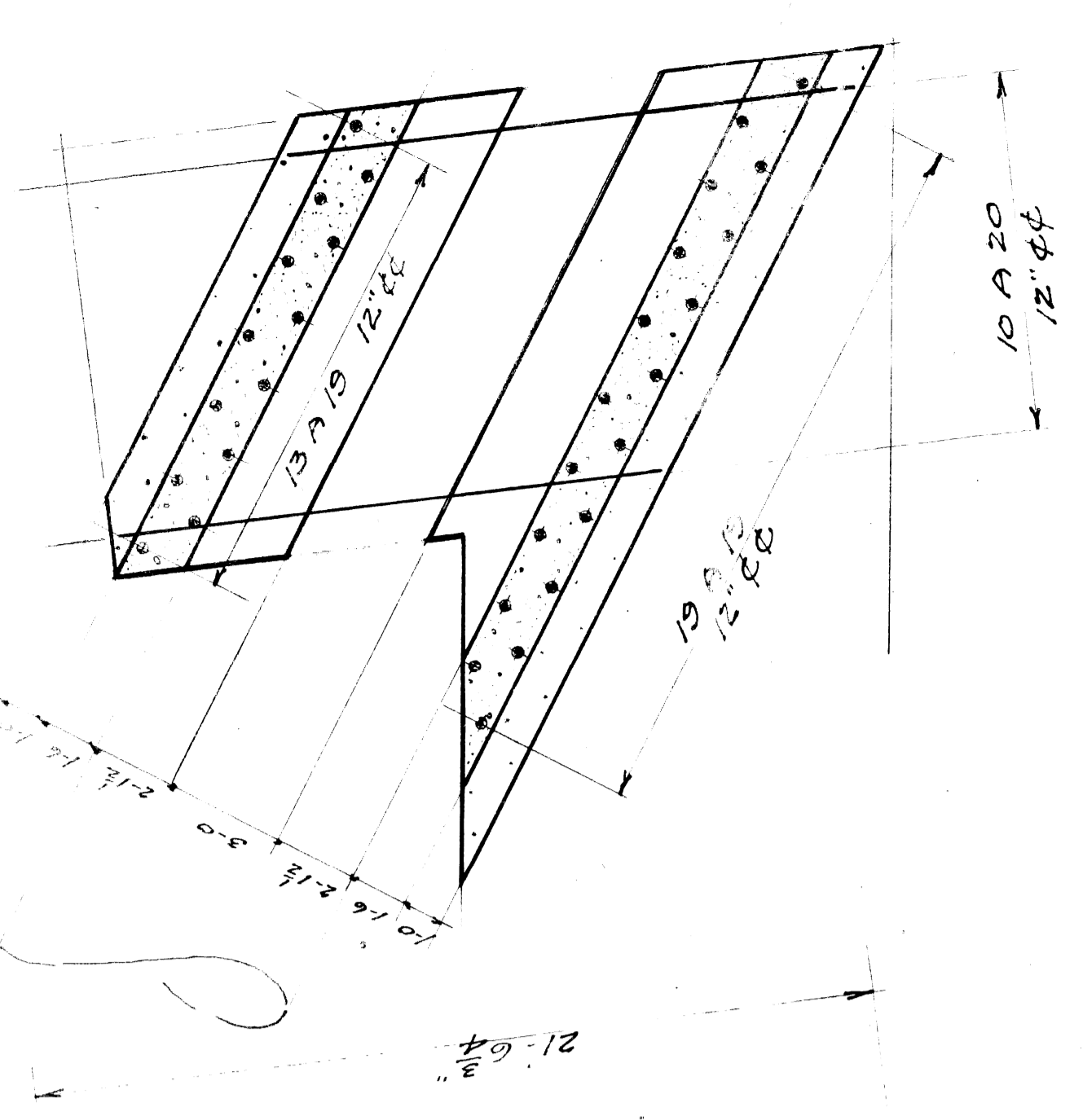
172 A 1 18' 4"

171 A 2 18' 4"

171 A 3 18' 4"



PLAN OF EAST ABUTMENT WALL FOOTING



BAR LIST WEST ABUTMENT FOOTING

PCS	SIZE	LENGTH	SHAPE	MARK
164	3/4"	10'-6"		A 1
156	3/4"	7'-0"		2
162	3/4"	11'-4"		4" 3-10 3-10 3-10 A 33
10	3/4"	10'-6"		4
1	3/4"	2'-7"		2-0 2-2
1	3/4"	1'-6"		2-6
1	3/4"	3'-0"		7
1	3/4"	7'-6"		3-6
1	3/4"	4'-0"		4-0
1	3/4"	4'-6"		4-6
1	3/4"	6'-0"		5-0
1	3/4"	5'-6"		5-6
1	3/4"	6'-0"		6-0
1	3/4"	4'-6"		6-6
1	3/4"	4'-0"		7-0
1	3/4"	3'-6"		7-6
1	3/4"	8'-0"		8-0
1	3/4"	2'-6"		2-6 2-7 4-6 2-7 2-0 2-2
52	3/4"	4'-0"		19
10	3/4"	14'-0"		20
11	3/4"	12'-6"		21
99	3/4"	30'-0"		22
235	1/2"	6'-0"		Down to 19 0.c. outside face of wall
200	3/4"	6'-0"		" 15 0.c. inside face of wall
16	3/4"	3'-0"		24
6	1/2"	10'-6"		25
				26

BAR LIST EAST ABUTMENT FOOTING

PCS	SIZE	LENGTH	SHAPE	MARK
179	3/4"	10'-6"		A 1
171	3/4"	7'-0"		2
177	3/4"	11'-4"		4" 3-10 3-10 3-10 A 33
11	3/4"	12'-6"		21
99	3/4"	30'-0"		22
235	1/2"	6'-0"		Down to 19 0.c. outside face of wall
200	3/4"	6'-0"		" 15 0.c. inside face of wall
16	3/4"	3'-0"		24
6	1/2"	10'-6"		25
				26

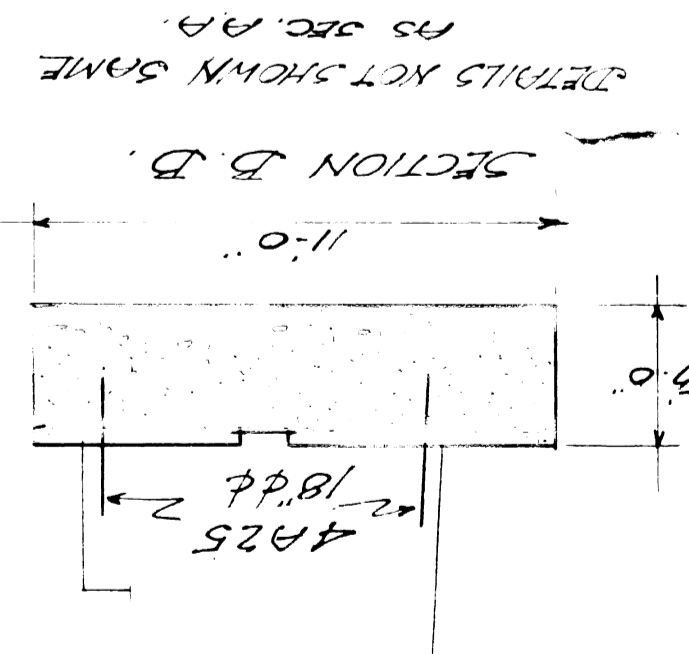
GABRIEL STEEL CO.
DETROIT, MICHIGAN

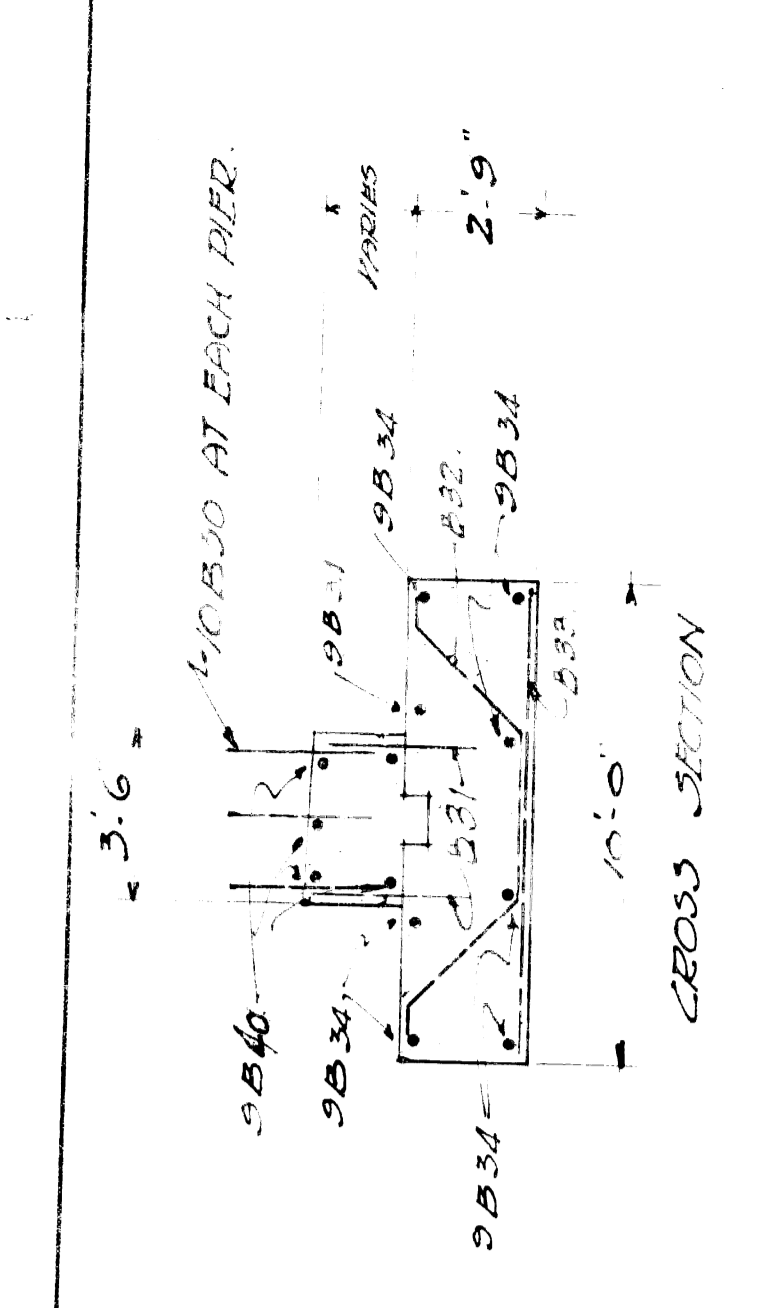
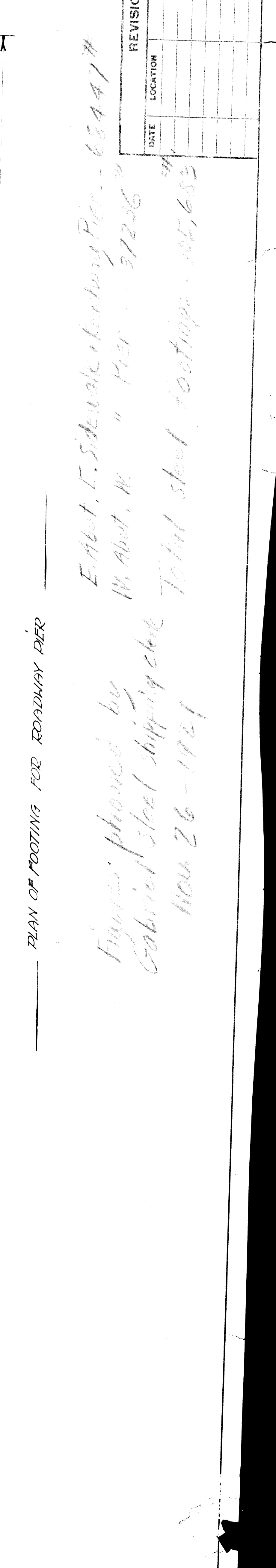
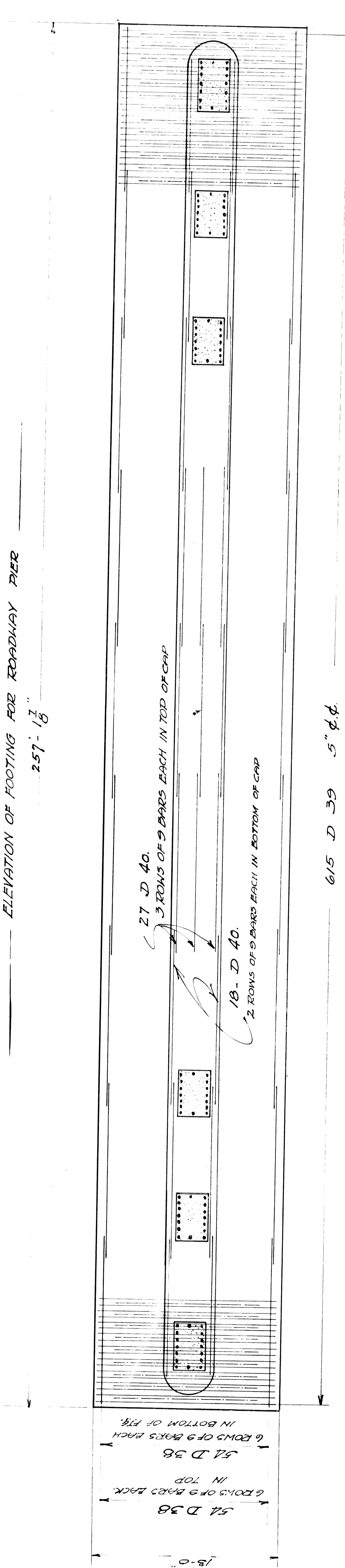
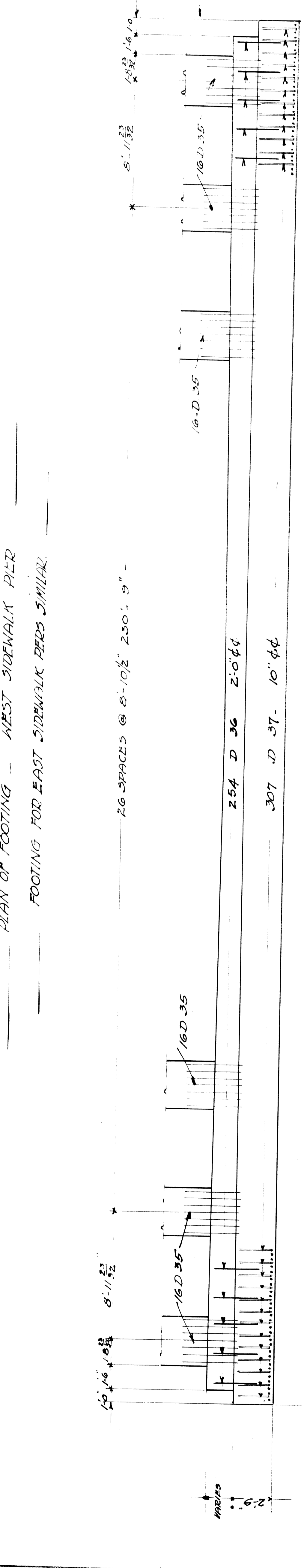
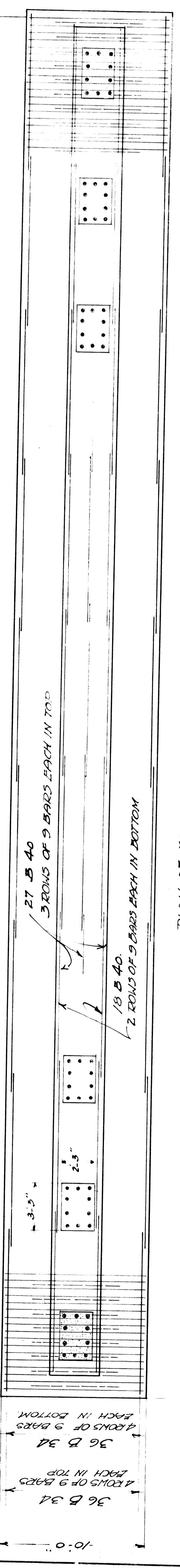
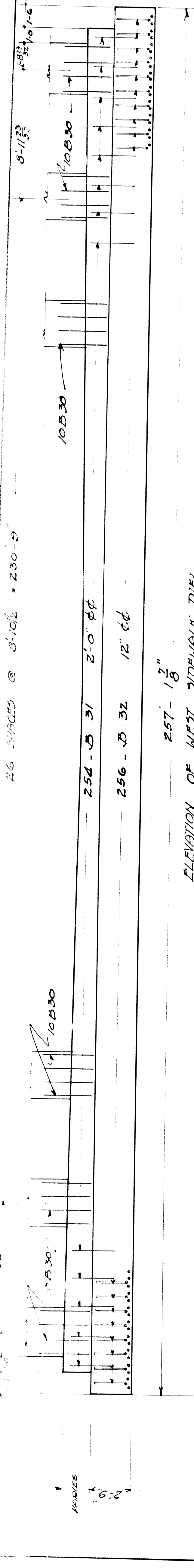
BY STRUCTURE **MILITARY AVE SUBWAY**
LOCATION **MILITARY AVE & K. R.**
TITLE **EAST WEST ABUTMENT WALL FOOTING**
CONTRACTOR **ZENYANE BROTHERS**
ARCHITECT **CITY ENGINEER**
DRAWN BY **N. S. A.**
CHECKED BY **F. E. W.**
DATE **NOV. 4, 1921**

JOB NO. 1000
SHEET NO. 10

REVISIONS

DATE	LOCATION	CHARACTER





BAR LIST - FOOTING FOR WEST SIDEWALK PIERS

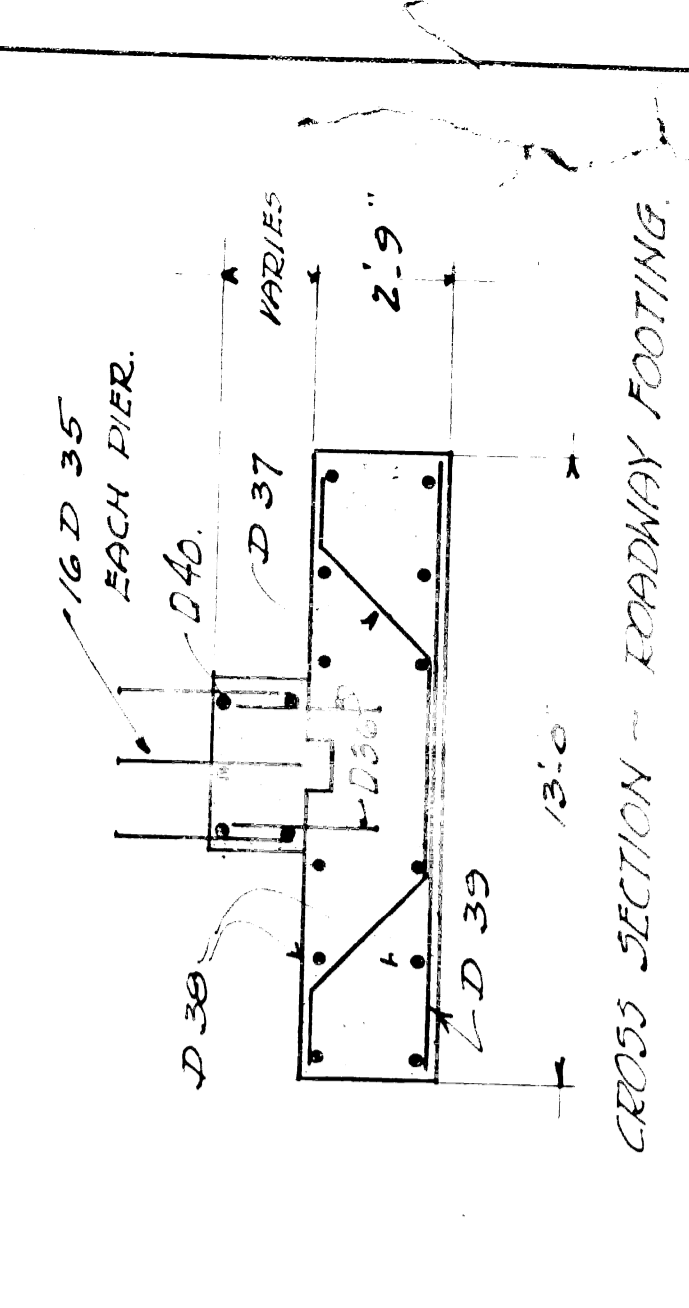
PCS	SIZE	LENGTH	SHAPE	MARK
290	3/4"	3'-6"	DONNELLS	B30
254	3/4"	3'-0"	DONNELLS	31
256	1/2"	11'-6"	DONNELLS	32
514	3/4"	9'-6"	DONNELLS	33
72	3/4"	30'-0"	DONNELLS	34
45	2"	30'-0"	DONNELLS	40

BAR LIST - FOOTING FOR EAST SIDEWALK PIERS

PCS	SIZE	LENGTH	SHAPE	MARK
290	3/4"	3'-6"	DONNELLS	C30
254	3/4"	3'-0"	DONNELLS	31
256	1/2"	11'-6"	DONNELLS	32
514	3/4"	9'-6"	DONNELLS	33
72	3/4"	30'-0"	DONNELLS	34
45	2"	30'-0"	DONNELLS	40

BAR LIST - FOOTING FOR ROADWAY PIERS

PCS	SIZE	LENGTH	SHAPE	MARK
264	1"	4'-0"	DONNELLS	D35
254	3/4"	3'-0"	DONNELLS	31
307	1/2"	14'-0"	DONNELLS	32
109	3/4"	30'-0"	DONNELLS	33
615	1/2"	12'-6"	DONNELLS	38
45	2"	30'-0"	DONNELLS	39



Figures prepared by
Gabriel Steel Shipping Co.
Nov 26 - 1921

E. Abt. E. Sidewalk Pier - 68447 #
M. Abt. M. " Pier - 37206 #
Total steel footings - 105,682

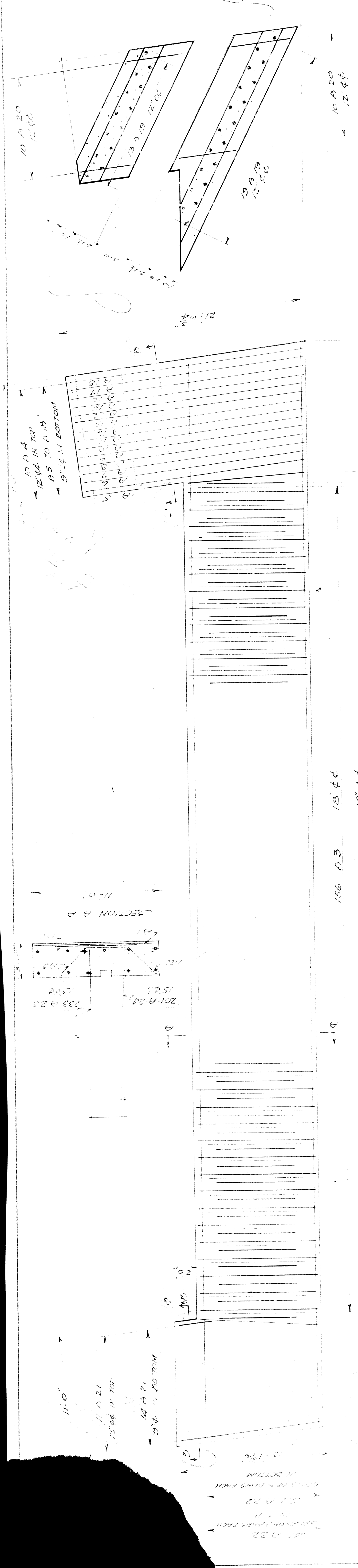
REVISIONS

DATE	LOCATION	CHARACTER

GABRIEL STEEL CO.
DETROIT, MICHIGAN

STRUCTURE: ROADWAY AND SIDEWALK
LOCATION: WINDY PIER & R.E.
TITLE: ROADWAY PIER FOUNDATIONS
CONTRACTOR: FAYAT & COMPANY
ARCHITECT: FAYAT & COMPANY
DRAWN BY: FAYAT & COMPANY
CHECKED BY: FAYAT & COMPANY
DATE: NOV 26 1921

JOB NO. 2197
SHEET NO. 2



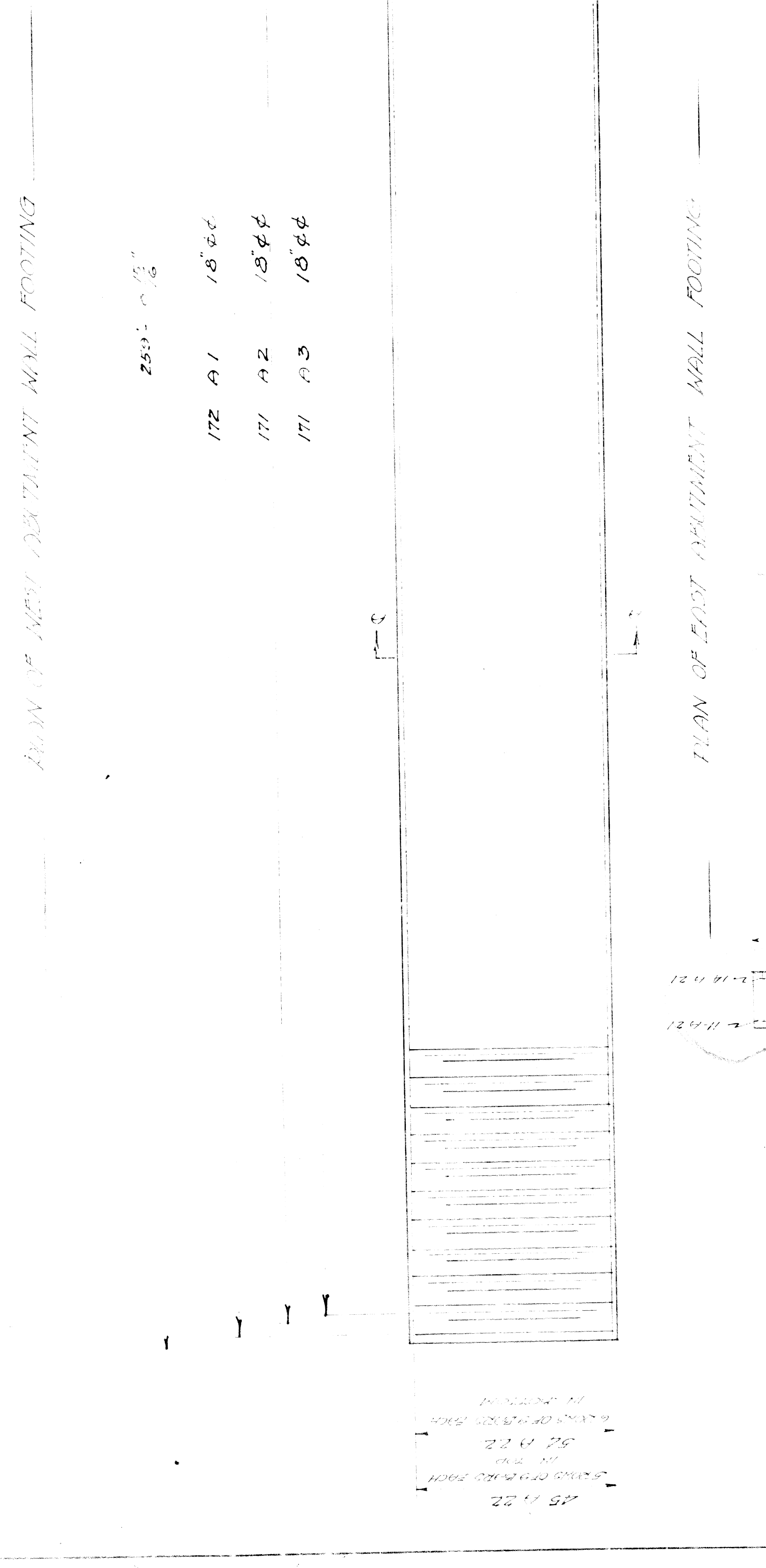
BAR LIST WEST ADJUTMENT FOOTING

POS	SIZE	LENGTH	SHAPE	AMT
1	17	17	17	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9
10	10	10	10	10
11	11	11	11	11
12	12	12	12	12
13	13	13	13	13
14	14	14	14	14
15	15	15	15	15
16	16	16	16	16
17	17	17	17	17
18	18	18	18	18
19	19	19	19	19
20	20	20	20	20
21	21	21	21	21
22	22	22	22	22
23	23	23	23	23
24	24	24	24	24
25	25	25	25	25
26	26	26	26	26
27	27	27	27	27

BAR LIST EAST ADJUTMENT FOOTING

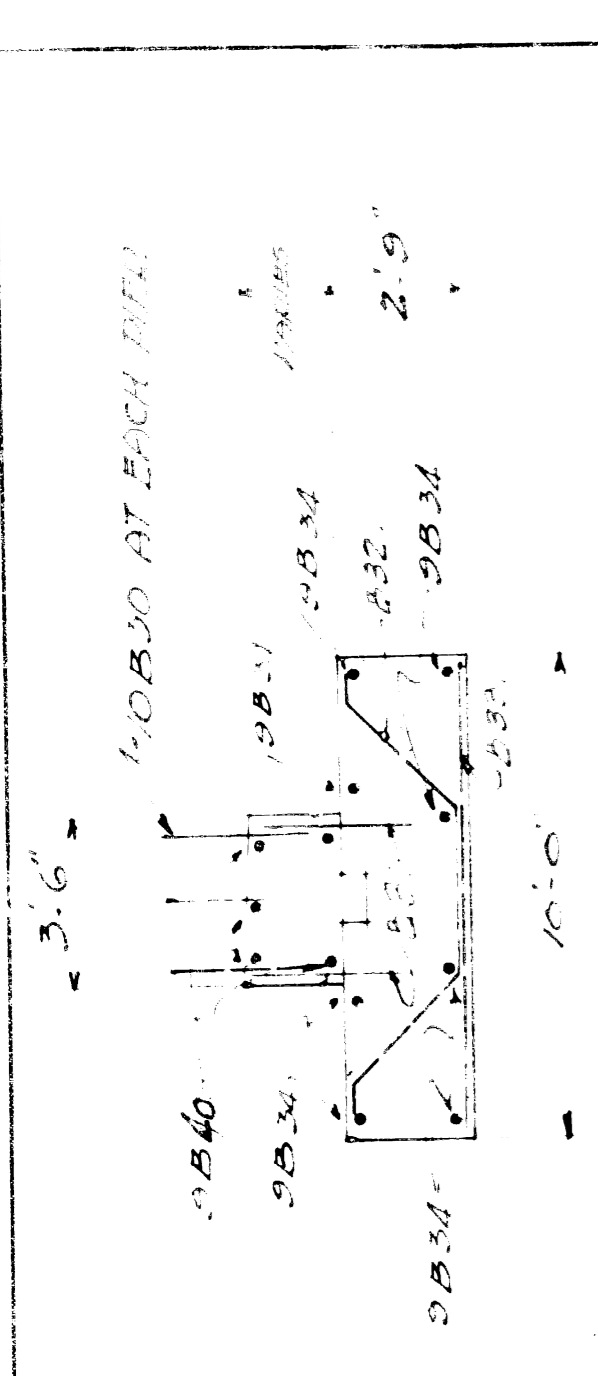
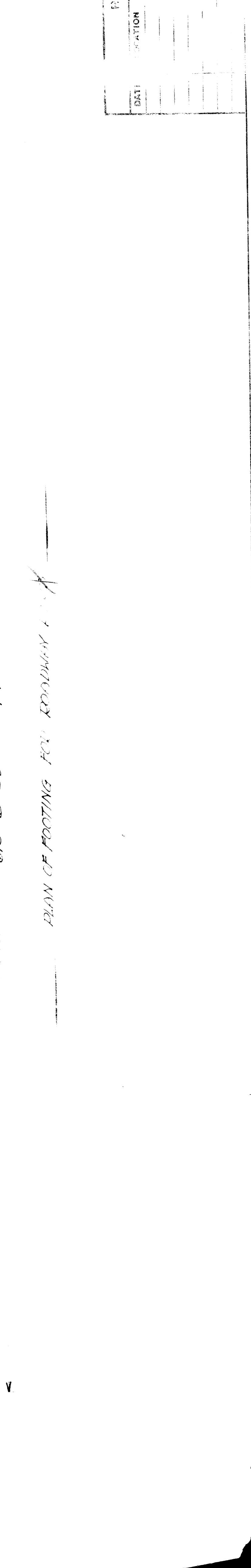
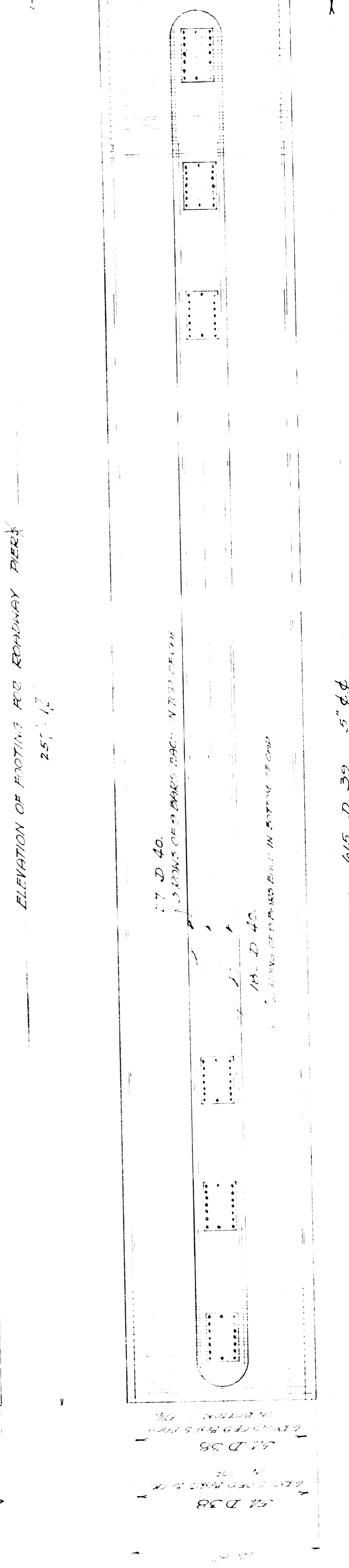
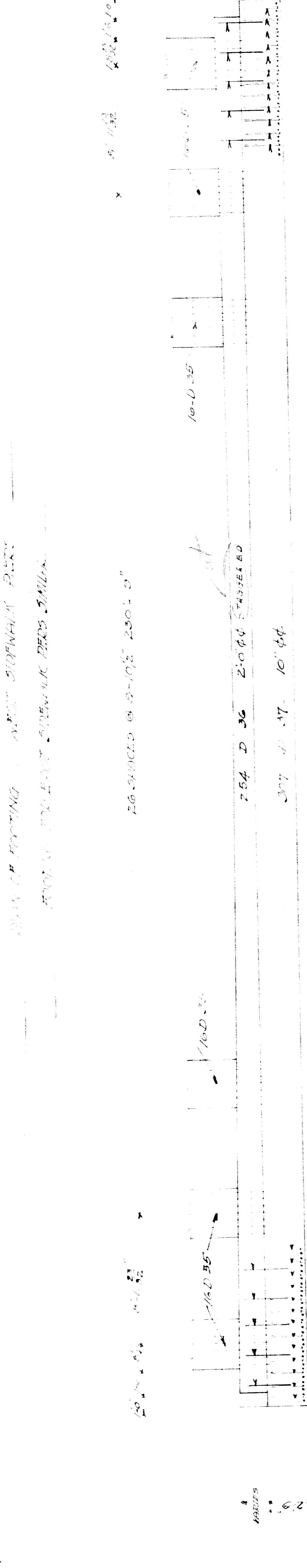
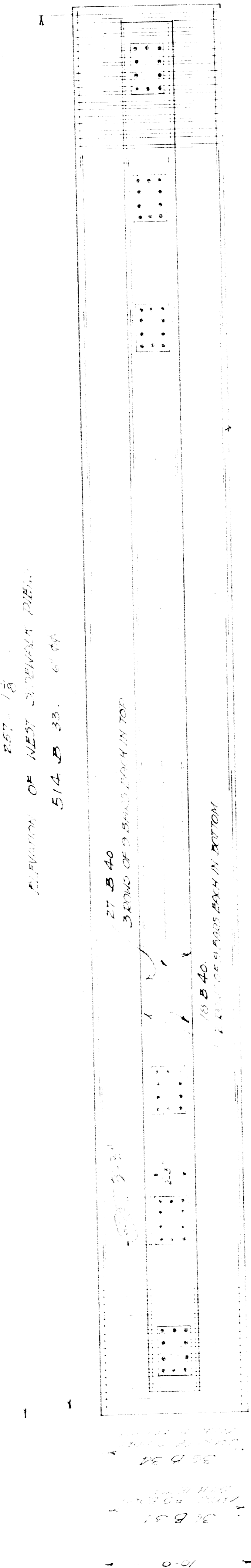
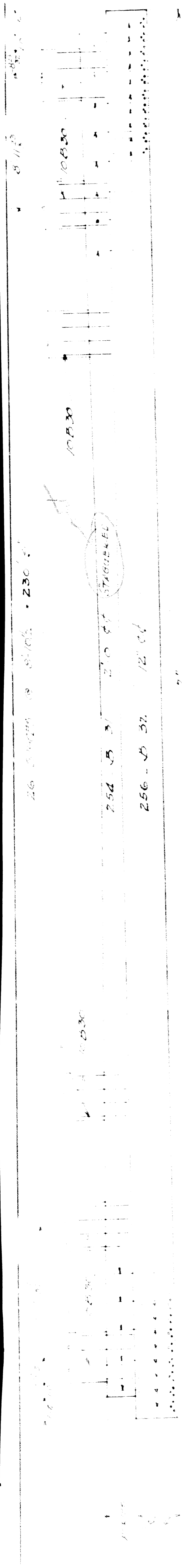
POS	SIZE	LENGTH	SHAPE	AMT
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9
10	10	10	10	10
11	11	11	11	11
12	12	12	12	12
13	13	13	13	13
14	14	14	14	14
15	15	15	15	15
16	16	16	16	16
17	17	17	17	17
18	18	18	18	18
19	19	19	19	19
20	20	20	20	20
21	21	21	21	21
22	22	22	22	22
23	23	23	23	23
24	24	24	24	24
25	25	25	25	25
26	26	26	26	26
27	27	27	27	27

PLAN OF WEST ADJUTMENT WALL FOOTING



REVISIONS

DATE	LOCATION	CHARACTER

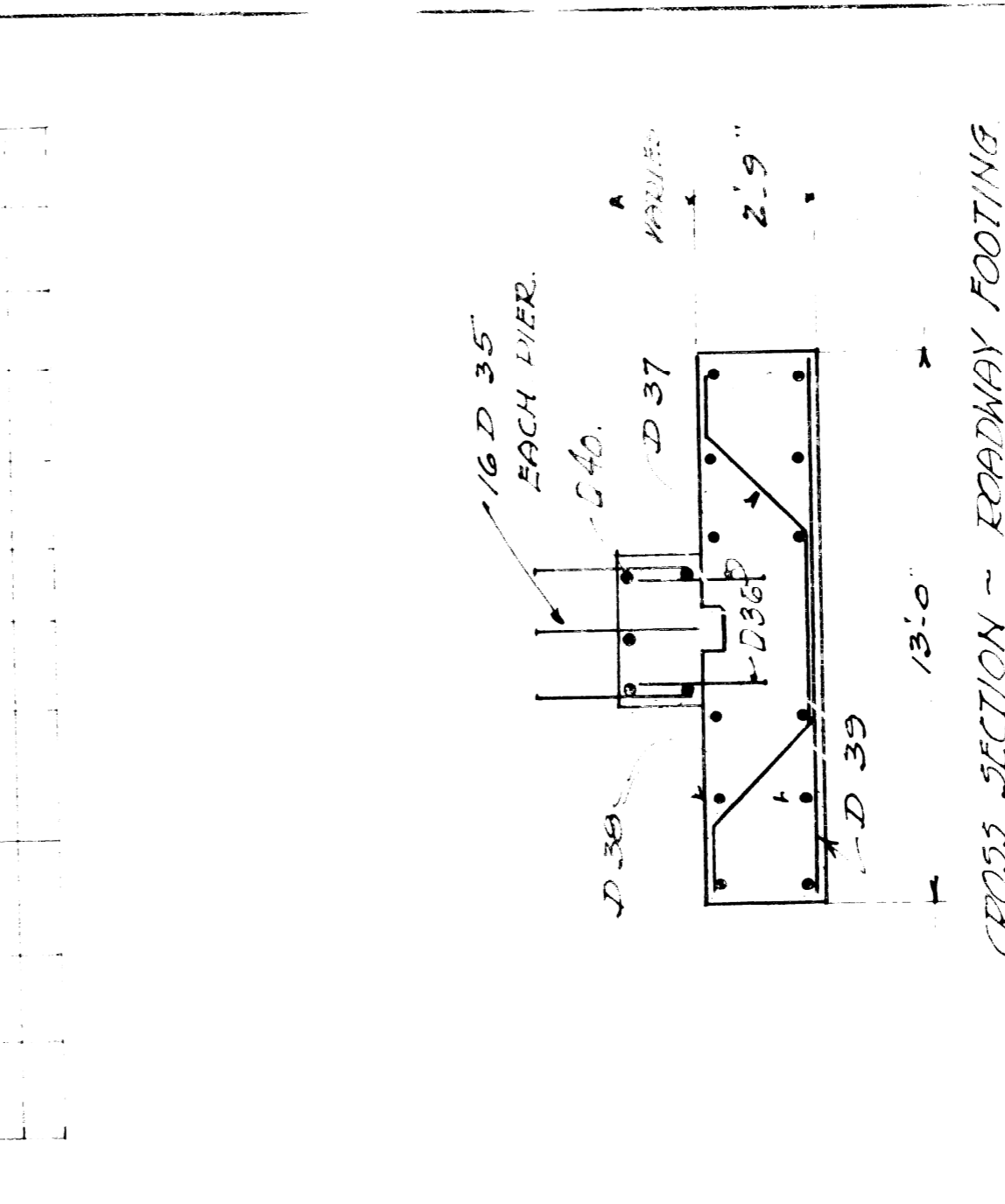


BAR LIST - FOOTING FOR WEST SIDEWALK PIERS

PKS	SIZE	LENGTH	SHAPE	NO.	MARK
290	3/4"	3-6	DOWNELS	3	B30
254	1/2"	3-0	DOWNELS	3	B1
255	1/2"	11-6	DOWNELS	6	B2
514	3/4"	9-6	DOWNELS	6	B3
72	3/4"	50-0	DOWNELS	6	B4
45	1/2"	50-0	DOWNELS	6	B5

BAR LIST - FOOTING FOR EAST SIDEWALK PIERS

PKS	SIZE	LENGTH	SHAPE	NO.	MARK
290	3/4"	3-6	DOWNELS	3	B30
254	1/2"	3-0	DOWNELS	3	B1
255	1/2"	11-6	DOWNELS	6	B2
514	3/4"	9-6	DOWNELS	6	B3
72	3/4"	50-0	DOWNELS	6	B4
45	1/2"	50-0	DOWNELS	6	B5



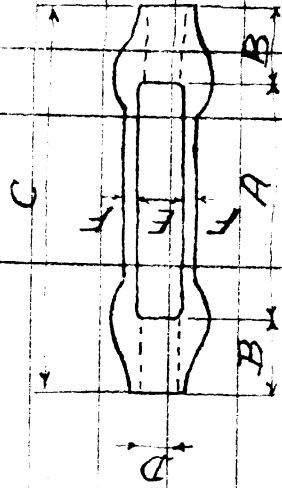
REVISIONS		GABRIEL STEEL CO.	
DATE	BY	BY	CHARACTER

STRUCTURE: ROADWAY PIER
 LOCATION: ...
 TITLE: ...
 CONTRACTOR: ...
 ARCHITECT: ...
 DRAWN BY: ...
 CHECKED BY: ...
 DATE: ...

WABASH-MILLER-LESLIE STEEL CO.
WORKS

STRUCTURAL MATERIAL

SHOP BILL					MILL ORDER					
As built Mark	Qty. of Pcs. on Cart on Shelf	Description	Section	Truck Feet	Weight Per Foot	Weight	Width Per Foot	Section	Length Feet	Item
		Turn-buckles	A B C		E 5" / 16	F 7 / 16				
	126		6"	1 1/2 9"						



Turn-
126 buckles

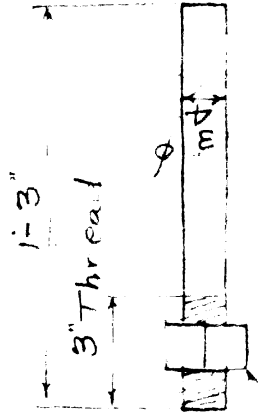
In Charge of: **H.C. Eilman**
 Made by: **G.D.S.** Date: **11/26/21**
 Checked by: **H.P.S.** Date: **1/5/22**
 Shop No. _____ Date _____
 Page No. **M2** Drawing No. _____
 Contract No. **9842-P**

McClintic-Marshall Construction Co.

POTTSTOWN WORKS

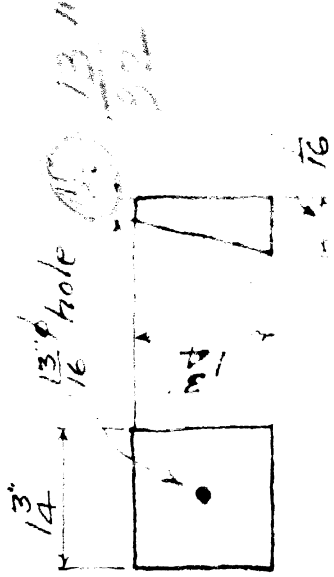
BILL OF RODS FOR Military Avenue Subway
 PURCHASER City of Detroit, Dept. of Public Works.

ITEM	FINISHED	Sect.	Length	Dia.	Type	Hole	Screw	NUTS		WASHERS		MILL COUPLER		Item No.
								Length	No.	Length	No.	Length	No.	
B R1	102	3" ϕ	24-10 $\frac{1}{2}$				Right 3" ϕ							
B R2	10	"	22-6 $\frac{1}{2}$	"	"	"	Left 4" ϕ	"	"	"	"	"	"	"
B R3	26	"	23-10 $\frac{3}{4}$	"	"	"	"	"	"	"	"	"	"	"
B R4	1	"	24-5 $\frac{1}{2}$	"	"	"	"	"	"	"	"	"	"	One end only
B R5	1	"	25-6 $\frac{1}{2}$	"	"	"	"	"	"	"	"	"	"	only



Sq. Nut

1394 3" ϕ 13 Anc Bolts.



1394 bevel washers (as per sketch)

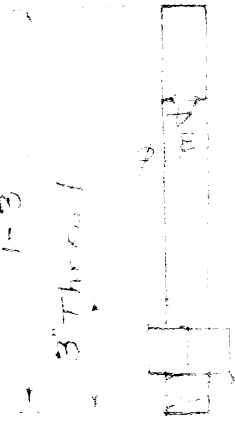
TYPE-A	TYPE-B	TYPE-C	TYPE-D	TYPE-E

McClintic-Marshall Corporation

BILL OF MATERIALS - Military Aircraft Equipment
 PURCHASED - City of Detroit, Dept of Public Works.

QTY.	DESCRIPTION	UNIT PRICE	TOTAL	REMARKS
B R1	16 2 ^{1/4} 24 10 1/2	25-3	51	
B R2	15 " 22-6 1/2 "	22-9	33	
B R3	16 " 23 10 1/4 "	24-3	32	
B R4	1 " 24 5 1/2 "	24-5 1/2	52	1 " 24 5 1/2 " } ³⁶ Coupled 1 " 24 5 1/2 " }
B R5	1 " 25 6 1/2 "	23 1/2	52	
B R6	112 " 12-3 1/2 "	cut from	51	

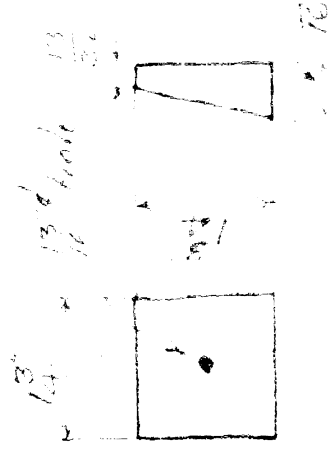
230 3/4 " 1 1/2 " 1/3. std. bolts for Anchors (11)
 1-3 " 1/4 Thread



SY. No

1420 3/8 " 1 1/2 " 1/3. std. bolts.

26 }
15 1/4 }



1420 bevel washers (as per cut)

use as B.F.P.

TYPE - A	CAGE NO	REVISED	DATE	BY	CHKD BY
TYPE - A	1420	1	10/21	W.F.G.	W.E.G.

Checked by H.G. Finnegan

Reviewed by

Checked by

Date

Order No

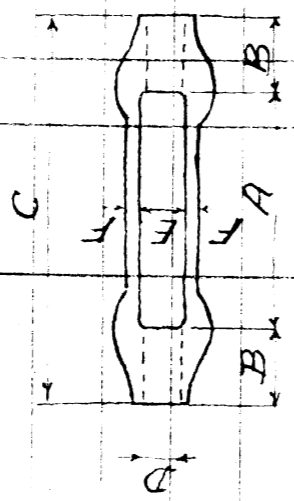
W.F.G. Date 11/24/21 Quantity 1242 R

1071

McClintic-Marshall Construction Co.

STRUCTURAL MATERIAL

In Charge of			SHOP BILL							MILL ORDER				
Shop	Temp.	Truck	Drawn	Section	Part	Weight	Part	Weight	Part	Weight	Part	Weight	Part	Weight
A. M.	Y. Out.	Y. In.	Foot	Part	Part	Part	Part	Part	Part	Part	Part	Part	Part	Part
			Factor	Per. Dpt.	Appr.	S. In. P.	S. In. P.	S. In. P.	S. In. P.	S. In. P.	S. In. P.	S. In. P.	S. In. P.	S. In. P.
			Mach.	Per. Wk.	Proc.	Q. In. P.	Q. In. P.	Q. In. P.	Q. In. P.	Q. In. P.	Q. In. P.	Q. In. P.	Q. In. P.	Q. In. P.
182				A	B	C	D	E	F					
				1/2"	9"	3"	5"	7"						
				Turn-										
				buckles										



56 }
 126 }
 Cleveland City }
 Forge & Iron 11/23/21 }

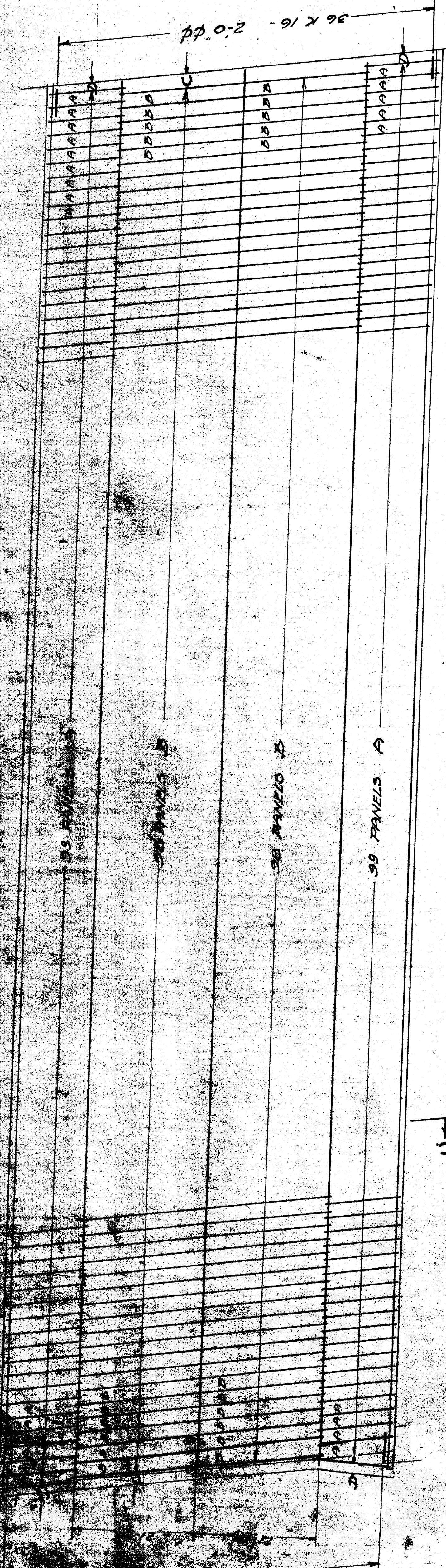
Use as B. F. P.

CONTRACT NO. 9842-R

In Charge of **C. Filman** Made by **G.D.S.** Date **11/26/21** Revised by _____ Date _____
 Checked by **G.D.S.** Date **11/26/21** Checked by _____ Date _____
 SHOP NO. _____ SHIP. CL. _____ DATE _____
 PAGE NO. **M2** DRAWING NO. _____

SLAB SCHEDULE

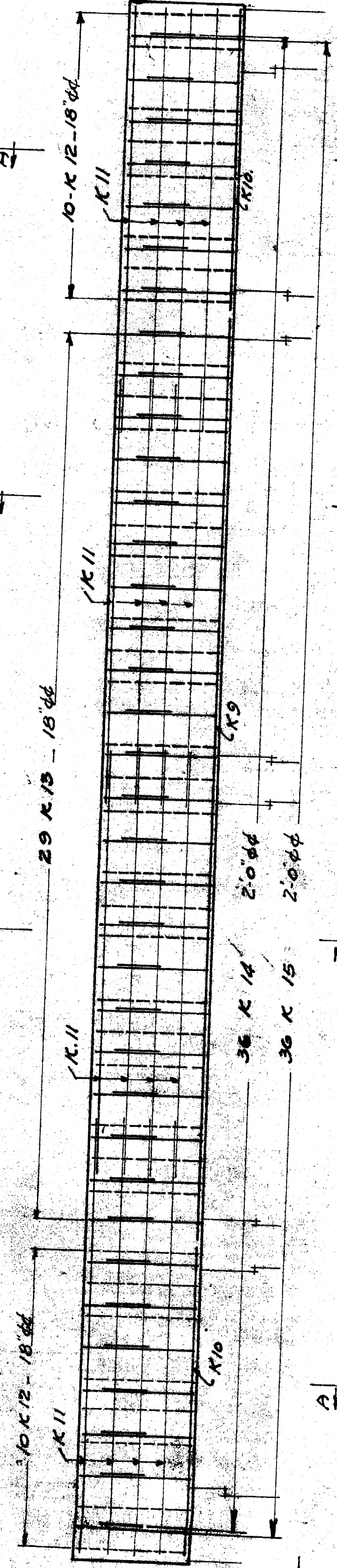
MARK	REINFT
A	2 K 1
	1 K 2
	2 K 3
	1 K 4
	6 K 5
B	4 K 6
	2 K 7
	1 K 8
C	5 K 9
D	2 K 10



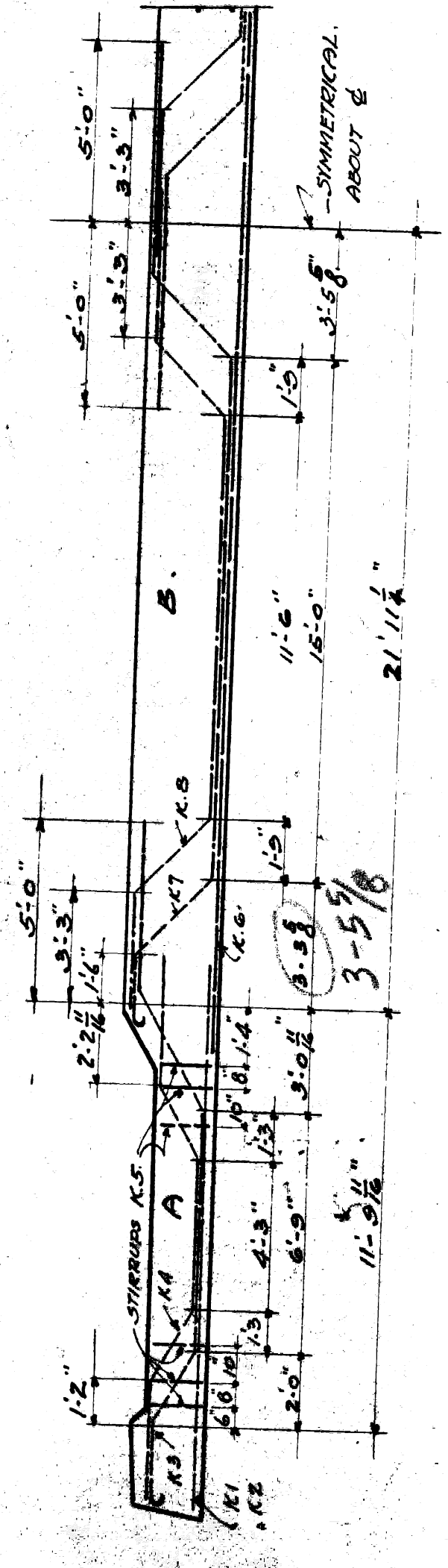
BILL OF MATERIAL

PCS	SIZE	LENGTH	SHAPE	MARK
396	1"Ø	15'-0"	—	K 7
198	3/4"	15'-0"	—	2
99	3/4"	20'-0"	—	3
198	3/4"	16'-3"	—	4
1188	7/8"	4'-6"	—	5
592	7/8"	46'-0"	—	6
372	7/8"	30'-0"	—	7
198	7/8"	25'-0"	—	8
10	8"	46'-0"	—	9
62	7/8"	15'-0"	—	10
62	7/8"	20'-0"	—	11
58	7/8"	5'-6"	—	12
72	5/8"	5'-8"	—	13
72	5/8"	5'-0"	—	14
72	5/8"	5'-0"	—	15
				16

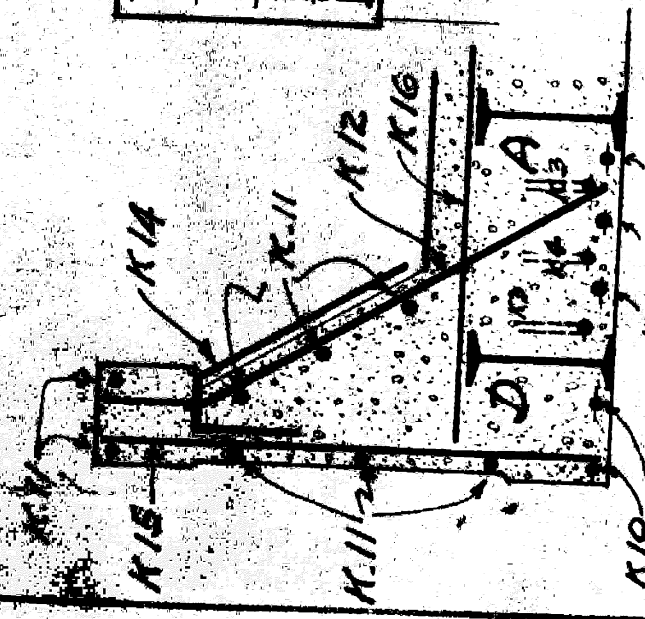
18500 Sq. Feet Canton Wire Mesh 3/4" x 3" @ 106.4 mesh.



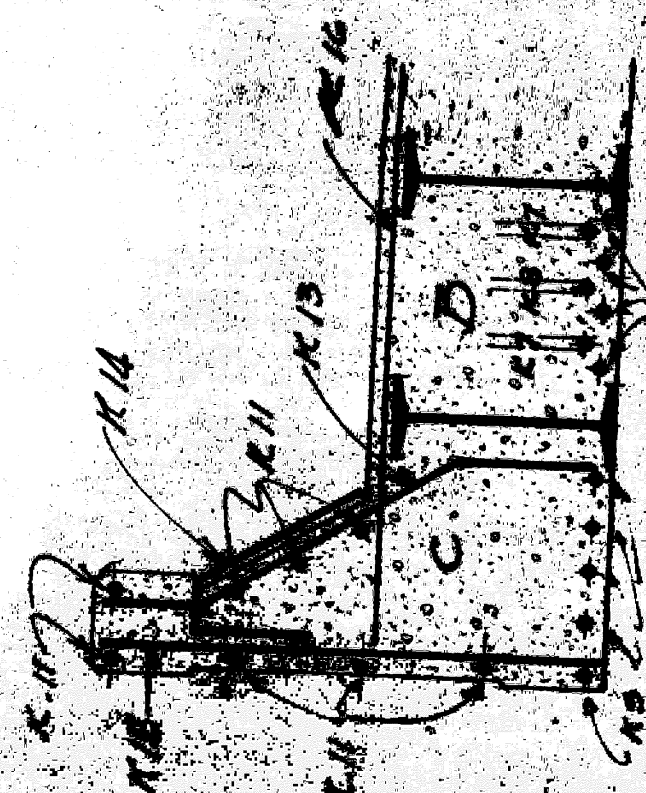
NORTH FACIA GIRDER
SOUTH FACIA GIRDER SIMILAR



CROSS SECTION C-C



SECTION A-A



SECTION B-B

Mar 7 - 22

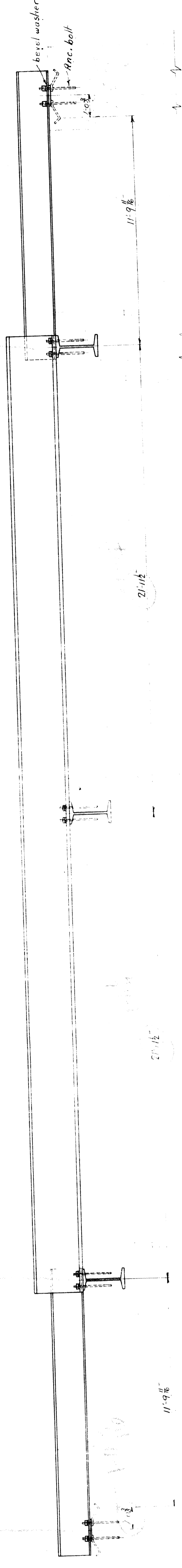
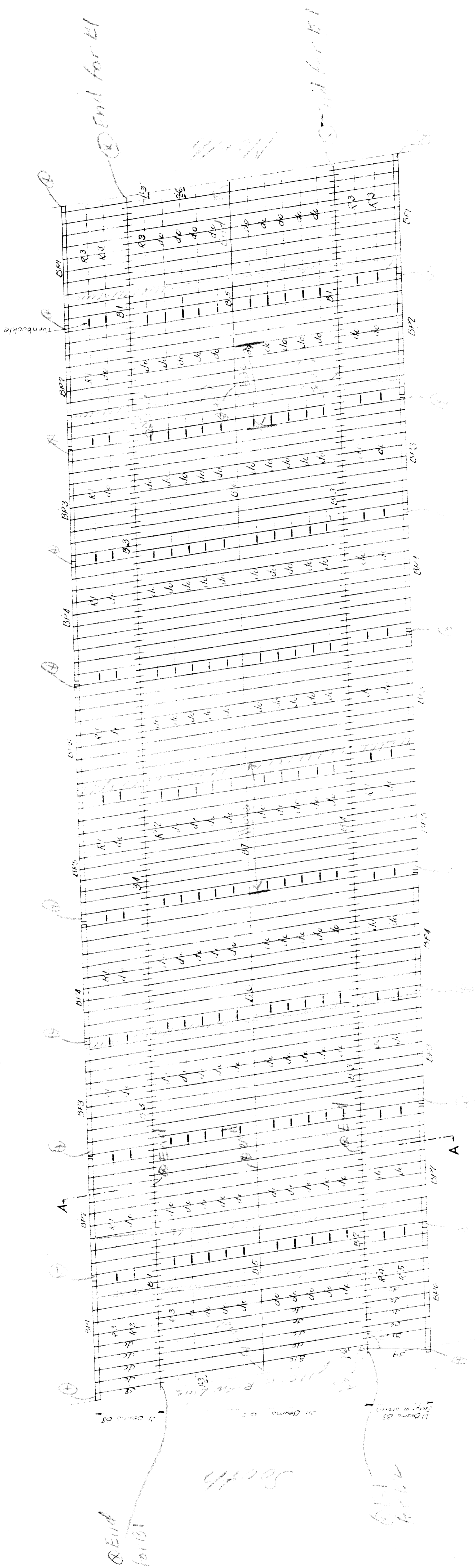
More work

OFFICE

REVISIONS		GABRIEL STEEL CO.	
DATE	LOCATION	CHARACTER	BY
3/6	General	Per Eng. Corrections	W.

STRUCTURE: MILITARY AVE. SUBWAY
 LOCATION: MILITARY AVE. & R.R.
 TITLE: SUPERSTRUCTURE
 CONTRACTOR: LEONARDE BRDS
 ARCHITECT: CITY ENGINEER
 DRAWN BY: H. B. M.
 CHECKED BY: J. E. H.
 DATE: DEC. 5, 1921
 JOB NO. 3497
 SHEET NO. 1

Corrections



1344 - 3/4" Anc. Bolts x 1'-3"
 1344 - bevel washers
 126 - Turnbuckles

SECTION A-A

*Not to make rivets
 1/2" away from rivets
 of bridge.*

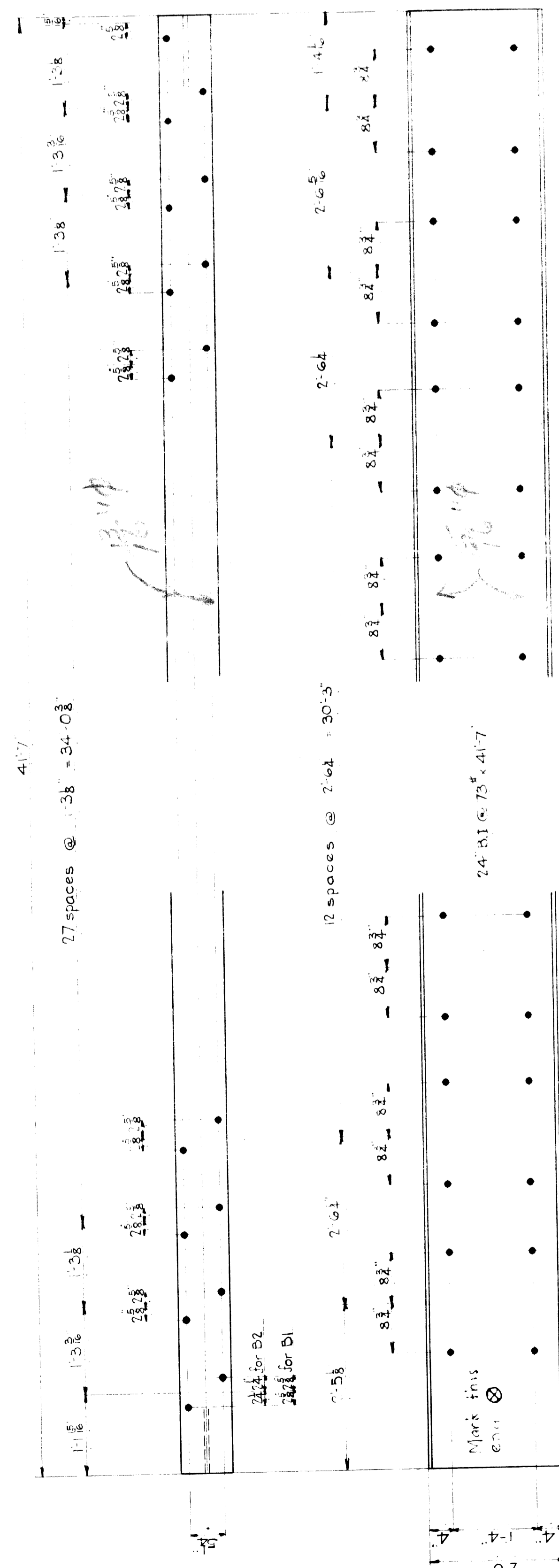
ITEM	QUANTITY	DESCRIPTION
Steel		
Shop		
Draw		
Spec.		
Rev.		
Check		
Appr.		
Drawn		
Scale		
Project		
Sheet		
Job		
City		
Contract		
Order		
Drawn		
Checked		
Approved		
By		
Date		

CITY OF DETROIT DEPT. OF PUBLIC WORKS
 MILITARY AVENUE SUBWAY
 UNDER M.C.R.R. - M.C.R.R. - AMBUSH - RR
 L.S. & M. RR - M.C.R.R. - AMBUSH - RR
 M. SLINTIC-MARSHALL CONST. CO.
 POTTSTOWN, PA.
 IN CHARGE H.C. FLYNN MADE BY E.S.C.
 CHECKED BY TRACED BY
 REVISED LAST ASSEM. N.H.
 CONT. NO. 9842-P
 SHEET

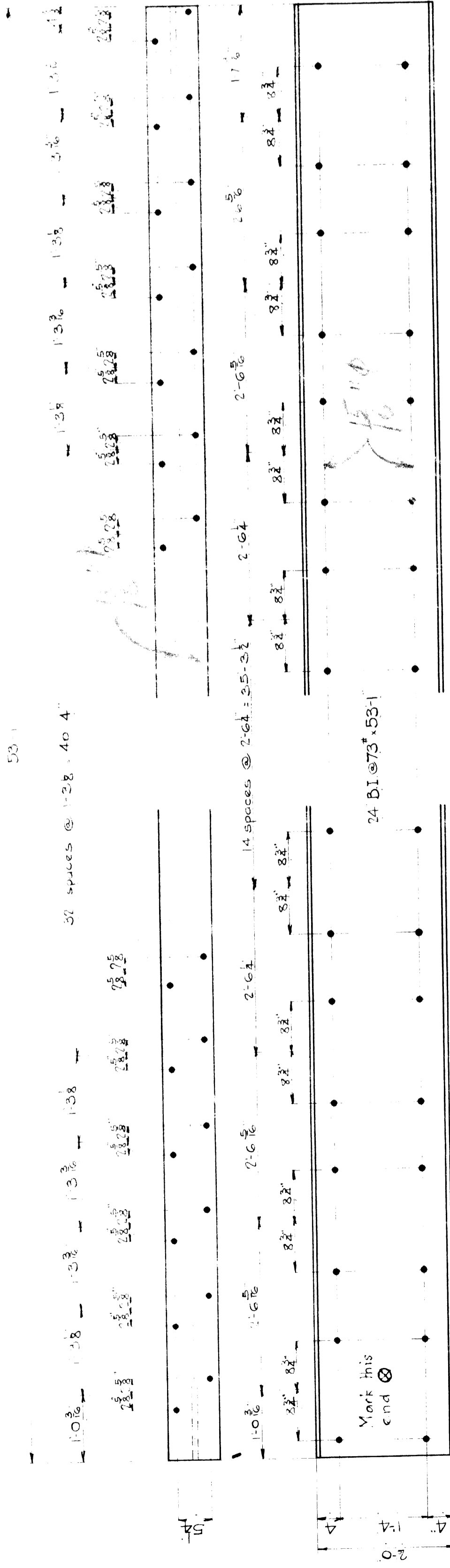
RIVETS
 PUNCH HOLES
 BEAM
 MILLING
 PAINT

SHOP NO.

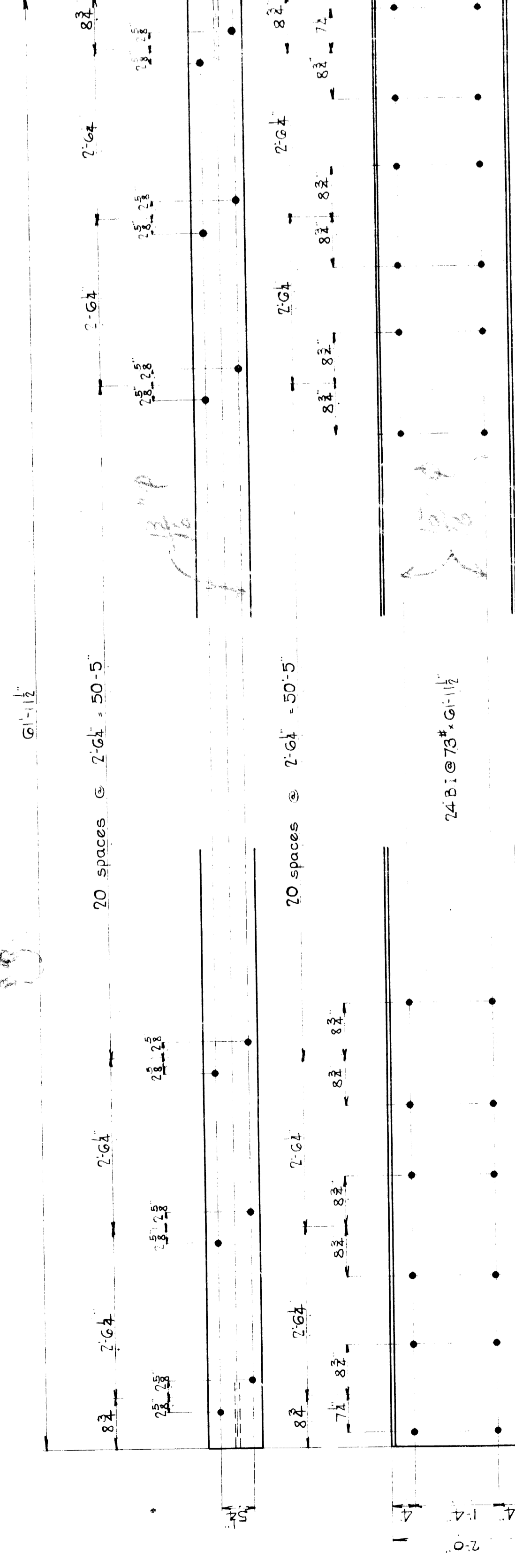
REQUIRED LIST		MARK
NO	DESCRIPTION	
3	BEAMS	B1
1	"	B2
4	"	B3
2	"	B4
2	"	B5
2	"	B6
1	"	B7



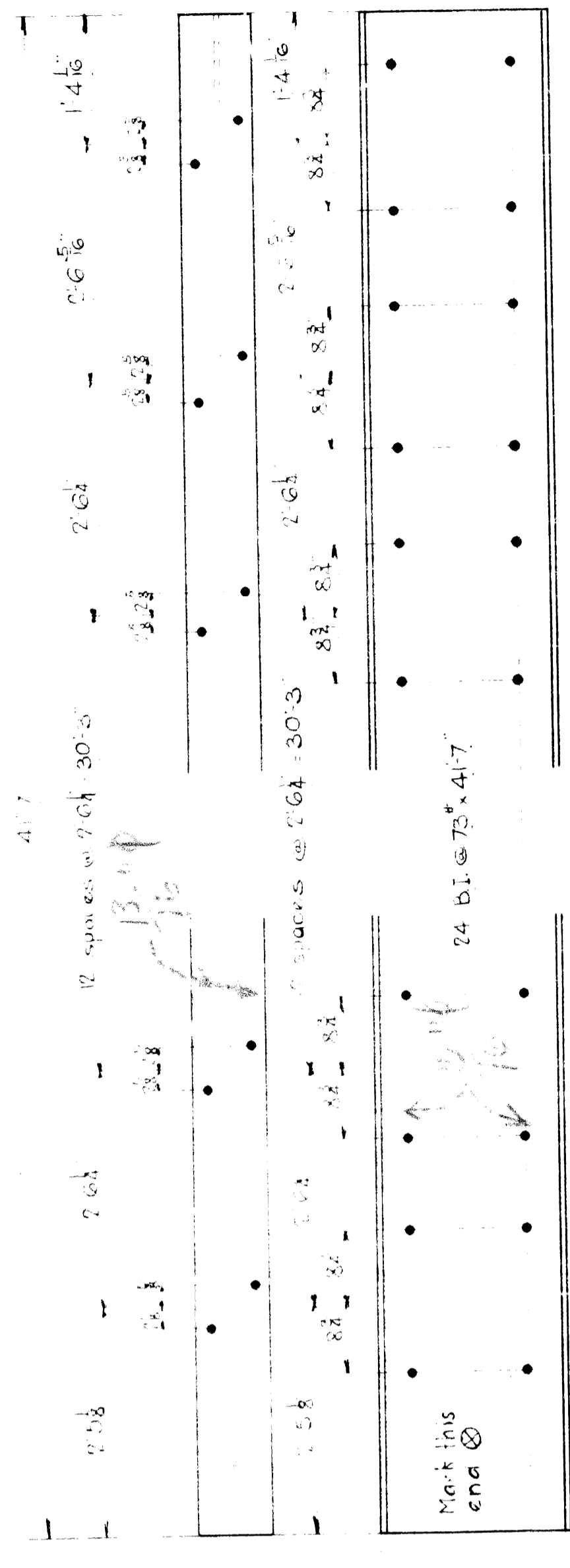
B1 & B2



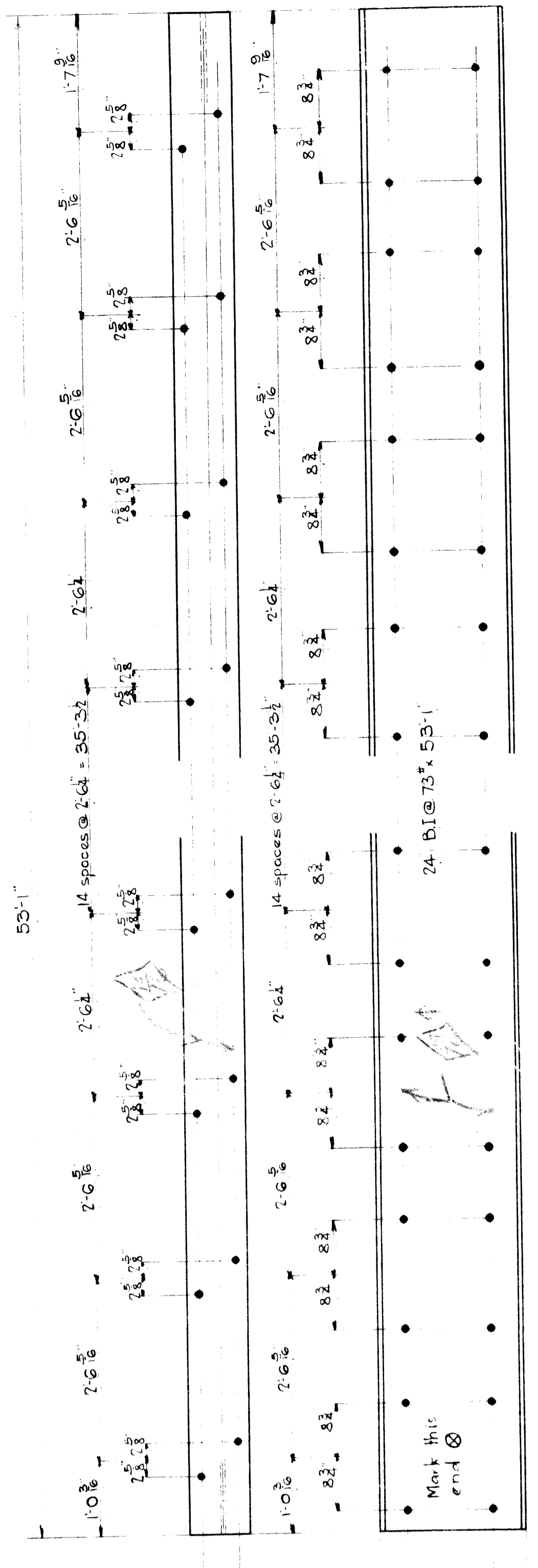
B3



B4



B5



B6



B7

BEAMS

CITY OF DETROIT - DEPT. OF PUBLIC WORKS

MILITARY AVENUE SUBWAY

UNDER

LS & M. RR. - VICKR. - WADASH. RR.

McCLINTIC-MARSHALL CONST. CO.

POTTSTOWN, PA.

IN CHARGE H.C. FILMAN

MADE BY WEG

CHECKED BY ESC

REVISED LAST ASSEM. M.H.

SHOP No. 9842-R

SHEET 1

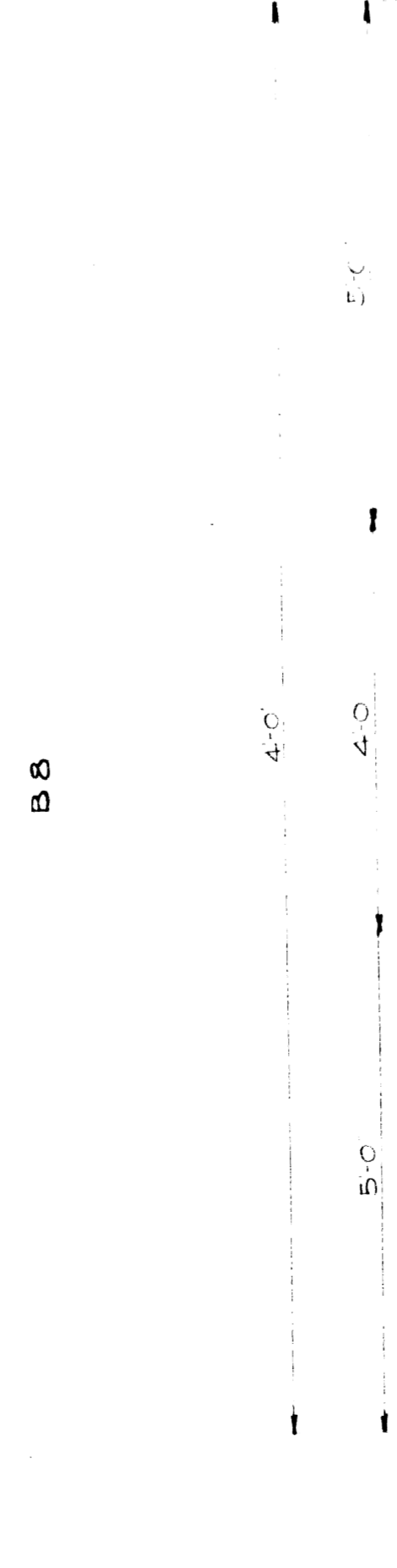
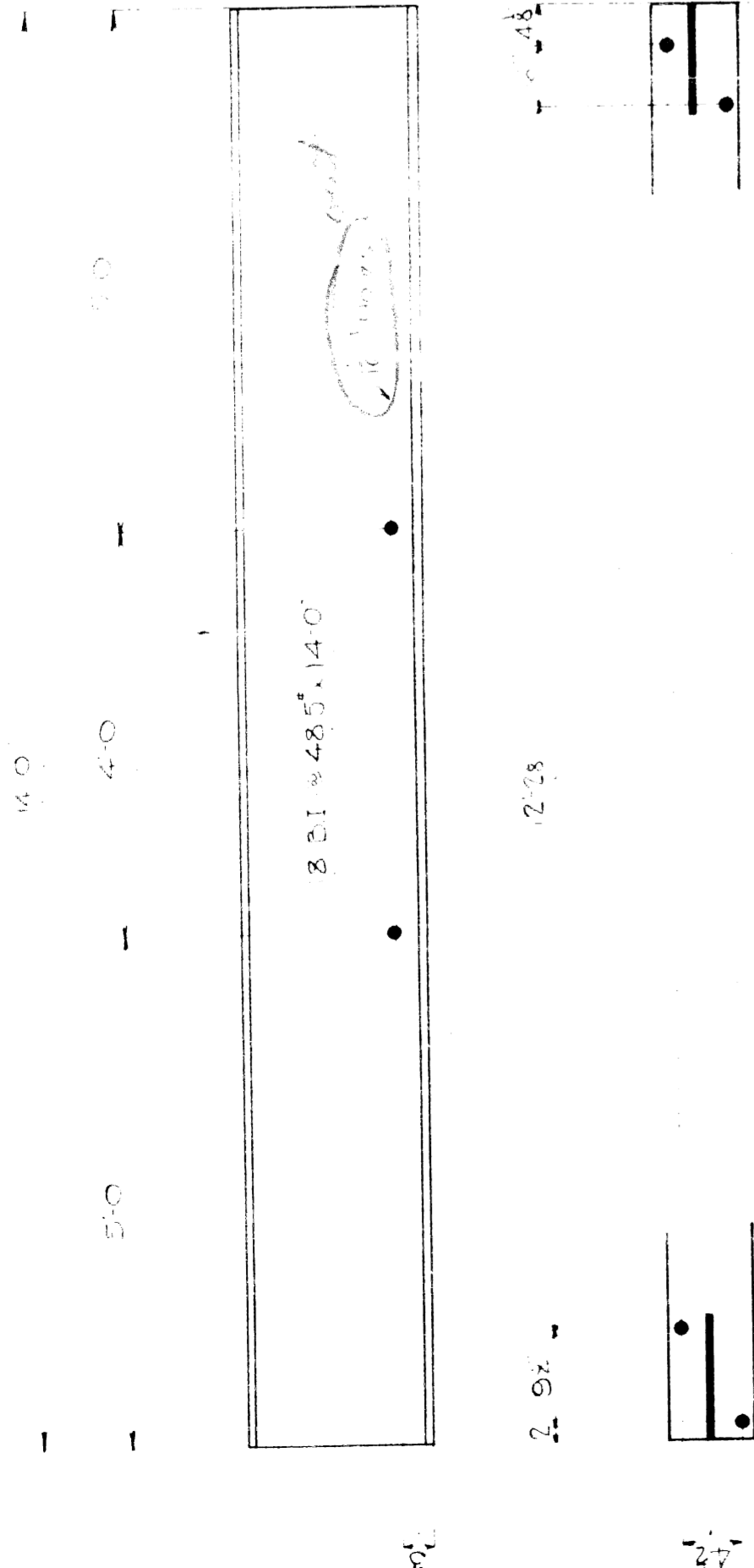
BEAMS None

PURCH HOLES None

BEAM None

MILLING None

PAINT None

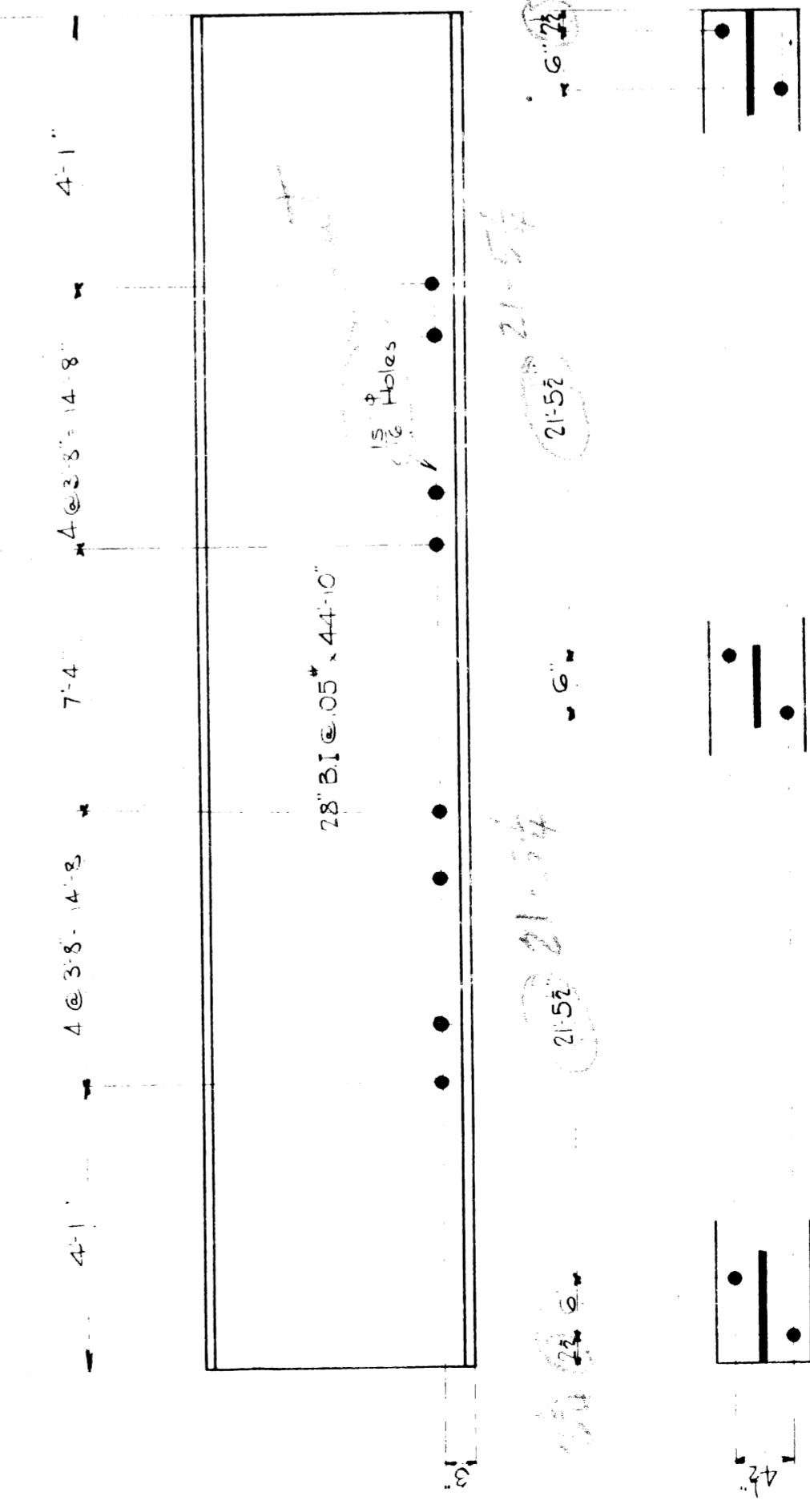
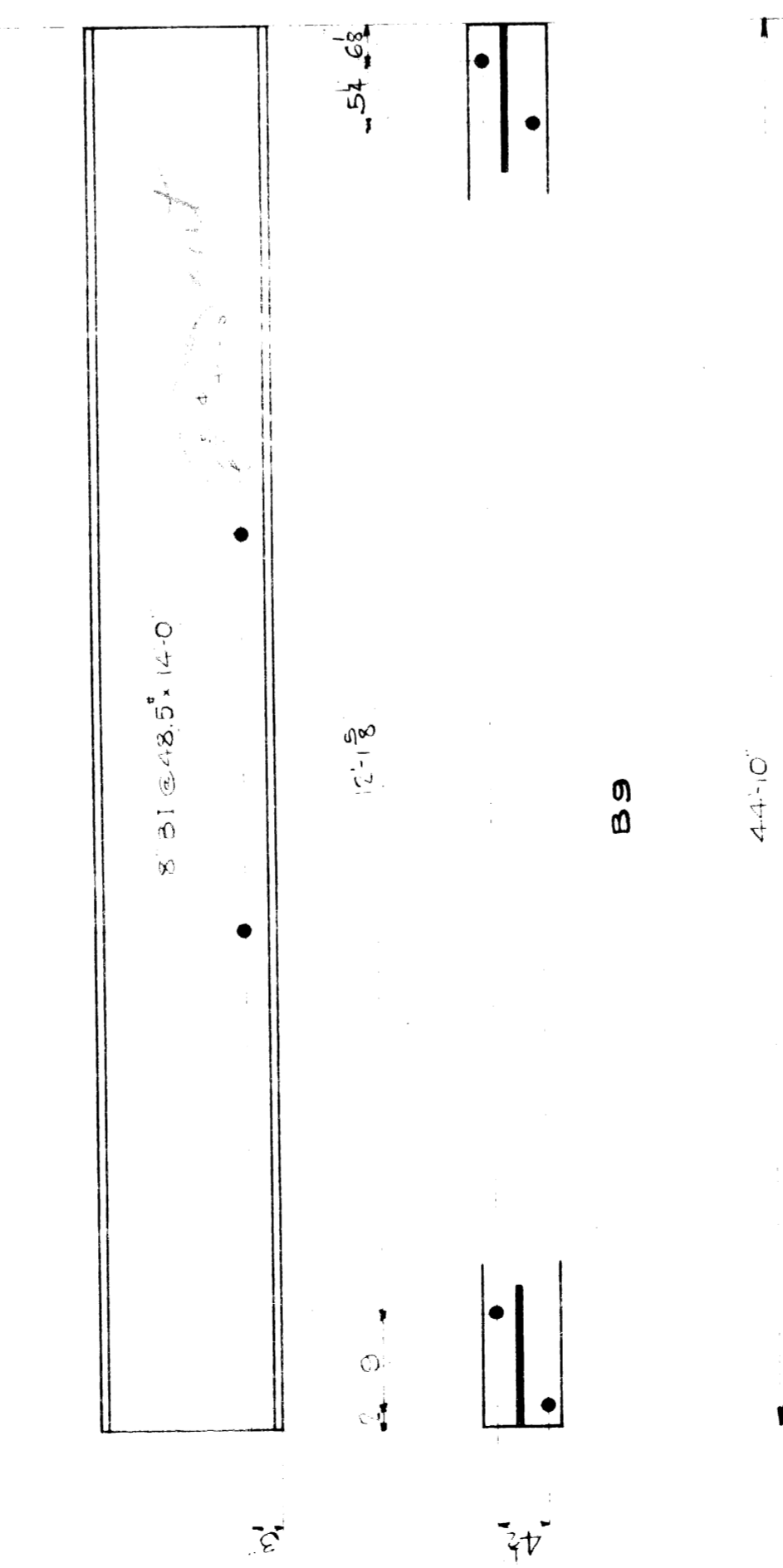
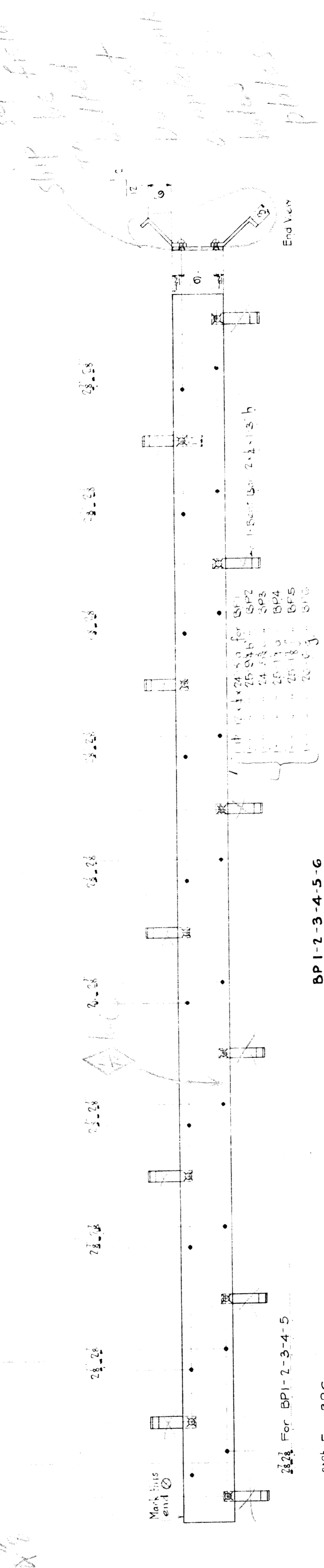


REQUIRED		AS	
NO.	DESCRIPTION	QUANTITY	REMARKS
B8	BEAMS	1	
B9	"	1	
B10	"	1	
SPACING		4'-0"	
REINFORCEMENT		4 #11	
REINFORCEMENT		4 #11	
REINFORCEMENT		4 #11	
REINFORCEMENT		4 #11	
REINFORCEMENT		4 #11	
REINFORCEMENT		4 #11	

220 STIMP ARCHIVE #1

BPI
 - BPI
 - BPI
 - BPI
 - BPI
 - BPI

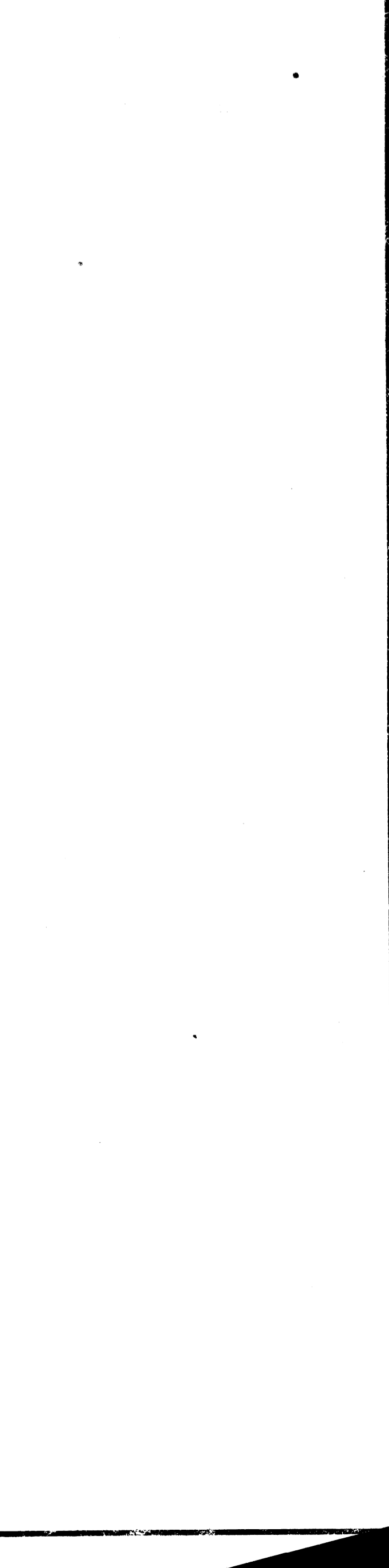
21' 8" - 20'-0"
 24' 8" - 20'-0"
 28' 8" - 20'-0"
 32' 8" - 20'-0"
 36' 8" - 20'-0"
 40' 8" - 20'-0"
 44' 8" - 20'-0"
 48' 8" - 20'-0"
 52' 8" - 20'-0"
 56' 8" - 20'-0"
 60' 8" - 20'-0"
 64' 8" - 20'-0"
 68' 8" - 20'-0"
 72' 8" - 20'-0"
 76' 8" - 20'-0"
 80' 8" - 20'-0"
 84' 8" - 20'-0"
 88' 8" - 20'-0"
 92' 8" - 20'-0"
 96' 8" - 20'-0"
 100' 8" - 20'-0"
 104' 8" - 20'-0"
 108' 8" - 20'-0"
 112' 8" - 20'-0"
 116' 8" - 20'-0"
 120' 8" - 20'-0"
 124' 8" - 20'-0"
 128' 8" - 20'-0"
 132' 8" - 20'-0"
 136' 8" - 20'-0"
 140' 8" - 20'-0"
 144' 8" - 20'-0"
 148' 8" - 20'-0"
 152' 8" - 20'-0"
 156' 8" - 20'-0"
 160' 8" - 20'-0"
 164' 8" - 20'-0"
 168' 8" - 20'-0"
 172' 8" - 20'-0"
 176' 8" - 20'-0"
 180' 8" - 20'-0"
 184' 8" - 20'-0"
 188' 8" - 20'-0"
 192' 8" - 20'-0"
 196' 8" - 20'-0"
 200' 8" - 20'-0"

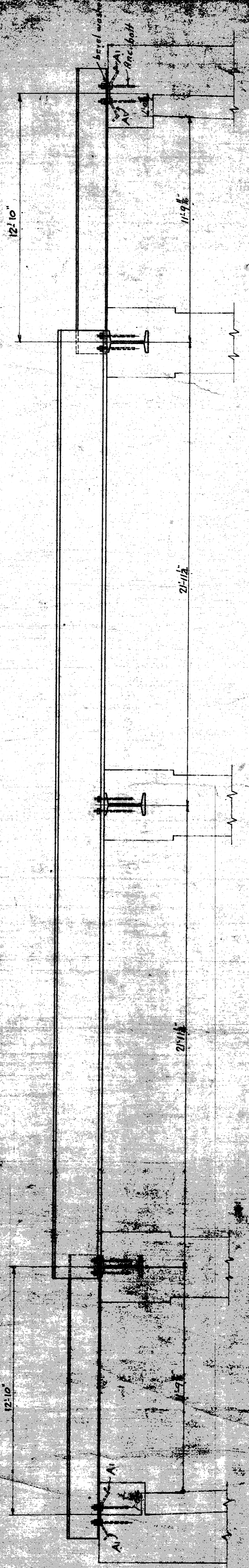
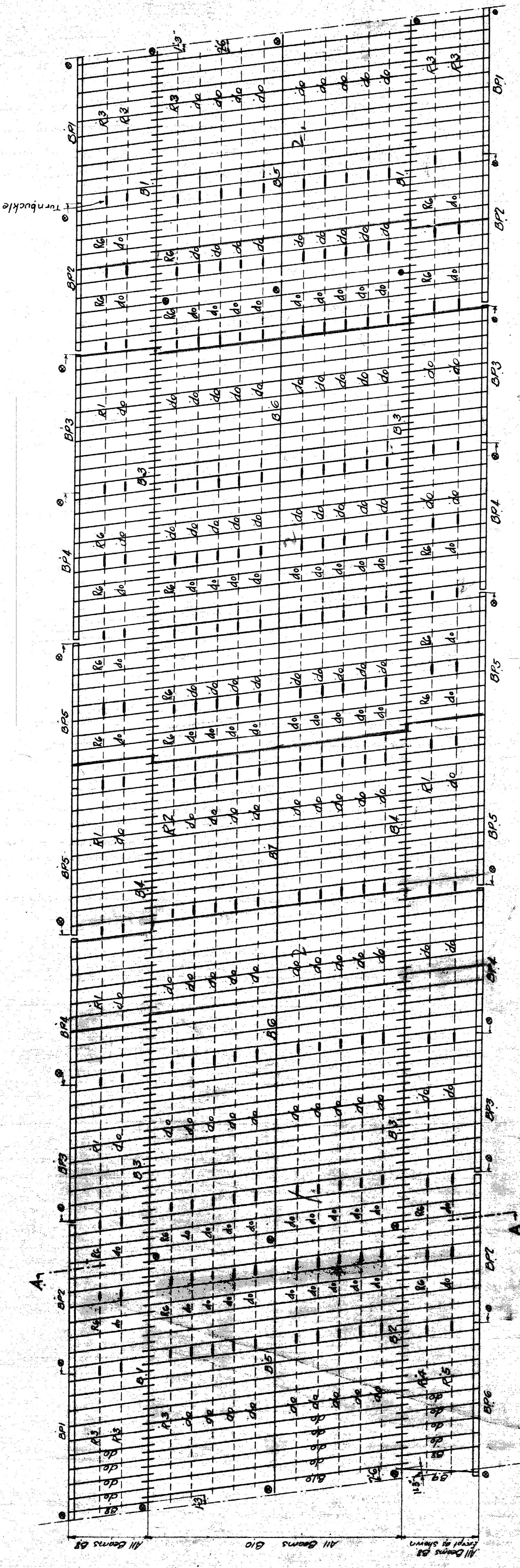


CITY OF DETROIT DEPT. OF PUBLIC WORKS
 MILITARY AVENUE SUBWAY
 LIS & M. RR. - MCRR - WABASH RR.
McCLINTIC-MARSHALL CONST. CO.
 POTTSTOWN, PA.
 IN CHARGE H.C. FILMAN MADE BY WEG
 CHECKED BY J.M. LEE TAPPED BY ESC
 REVISED BY J.M. LEE LAST ISSUE, MI.

RIVETS None 13 9 unless noted
 PUNCH HOLES 16
 BEAM None
 MILLING None
 PAINT None except for floor of Beams
 56.9-10 One coat of Red Lead

Beams: Plates
 SHOP No. 9842-R
 CONT. No. 9842-R
 SHEET 2





SECTION A-A

1394 - 3/4" Anc. Bolts x 1-3"
1394 - level washers.
782 - Turnbuckles.

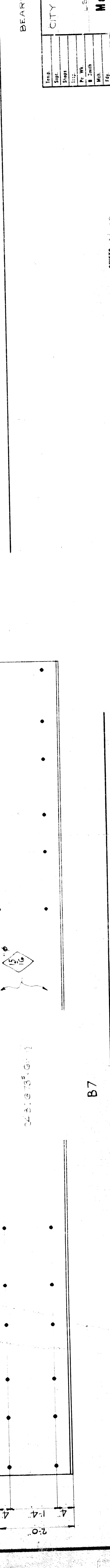
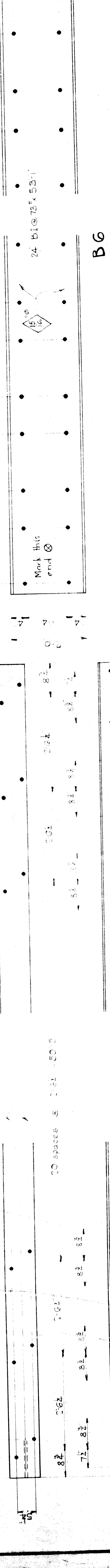
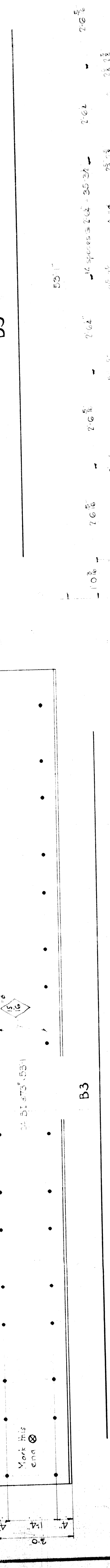
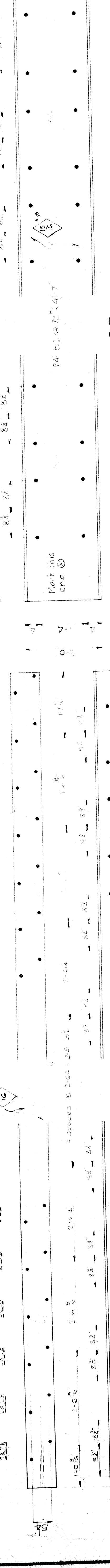
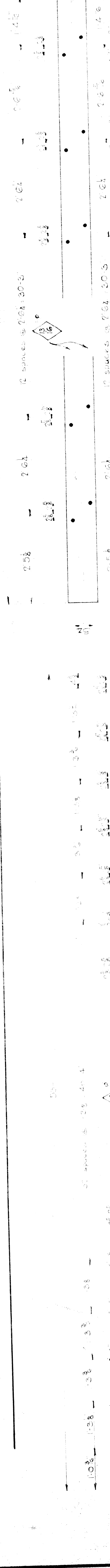
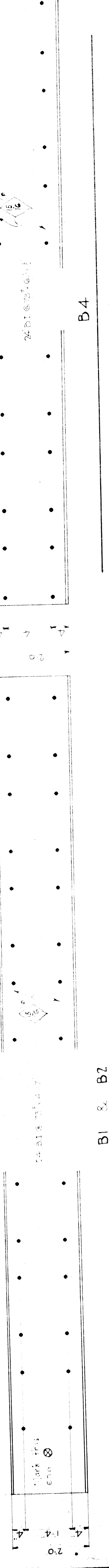
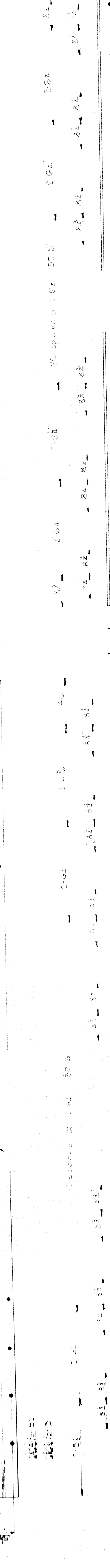
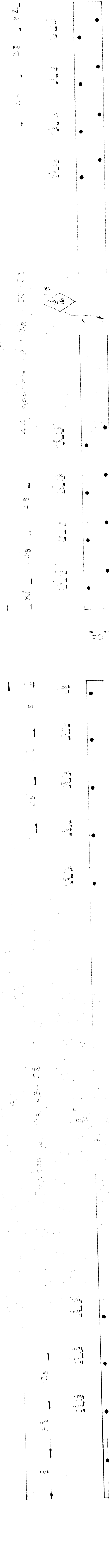
DATE	BY	REVISION

CITY OF DETROIT DEPT. OF PUBLIC WORKS
MILITARY AVENUE STATION
A.S.M. BRIDGE ENGINEERING
POTTSTOWN, PA.
DESIGNED BY G.B.S. 1/24/51
CHECKED BY [Signature]
DATE 2/10/51
JOB NO. 38420

- WELDS
- PUNCH HOLES
- BEAM
- MILLING
- PAINT

SHOP NO.

MARK	DESCRIPTION
B1	BEAMS
B2	"
B3	"
B4	"
B5	"
B6	"
B7	"

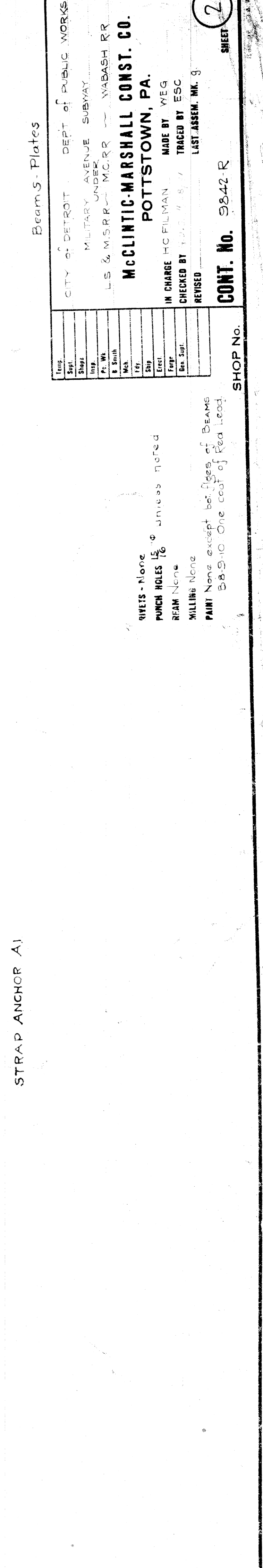
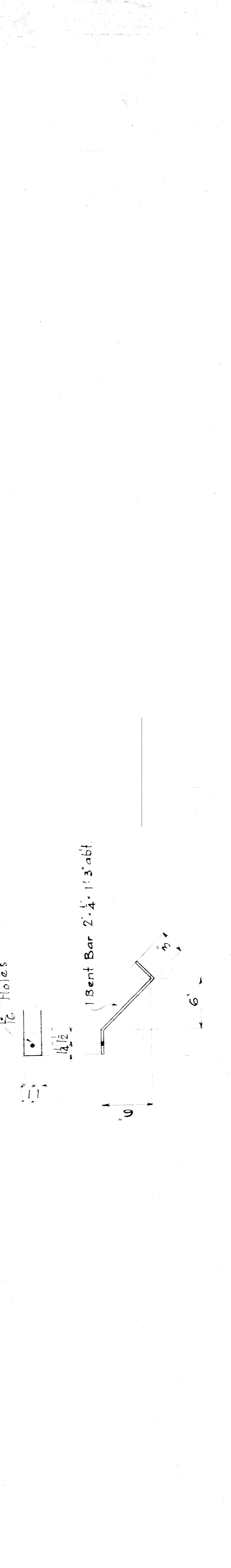
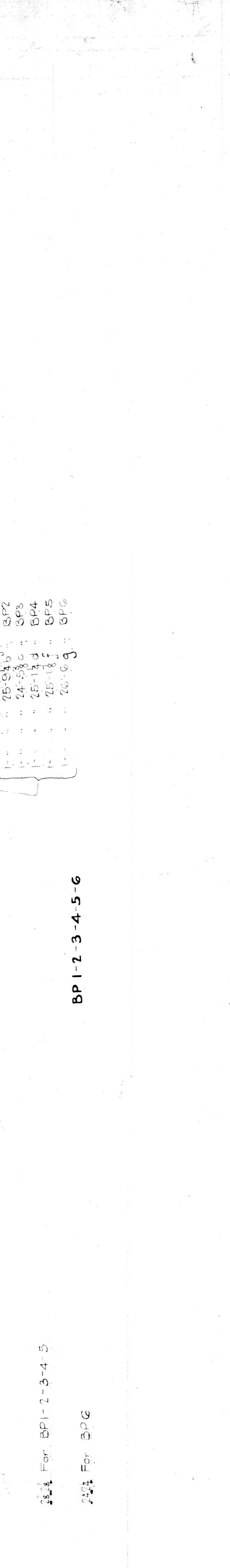
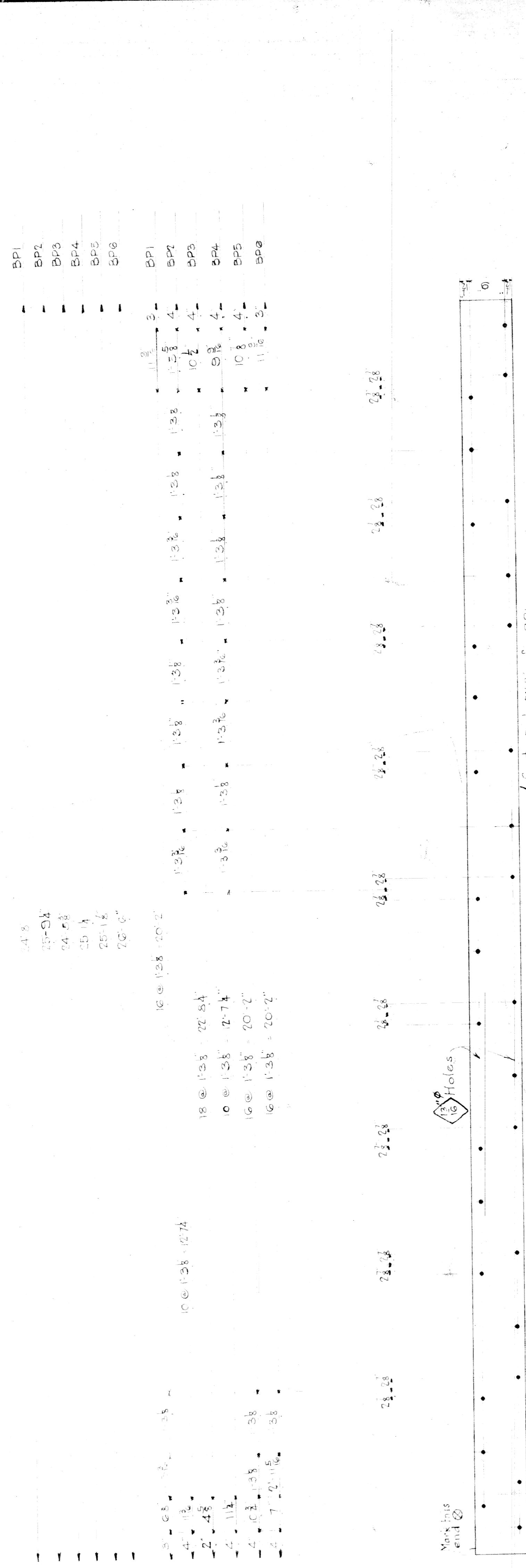


CITY OF DETROIT, DEPT. OF PUBLIC WORKS
 MILITARY AVENUE SUBWAY
 24 B1 @ 75' 4 1/2"
 POTTSTOWN, PA.
 McCLETTIC-MARSHALL CONST. CO.
 MADE BY WEG
 TRACED BY ESC
 CHECKED BY
 REVISED
 LAST ASSEM. HK.
 SHOP NO. 9842-R
 SHEET 1

BEARING BEAMS

DRIFTS None
 PUNCH HOLES 1/4" in webs
 BEAM None
 MILLING None
 PAINT None

REQUIRED LIST		
NO	DESCRIPTION	MARK
99	BEAMS	B8
1	"	B9
99	"	B10
3	BEARINGS	BPI
4	"	BPI2
4	"	BPI3
7	"	BPI4
4	"	BPI5
1	"	BPI6
220	STRAP ANCHORS	A1

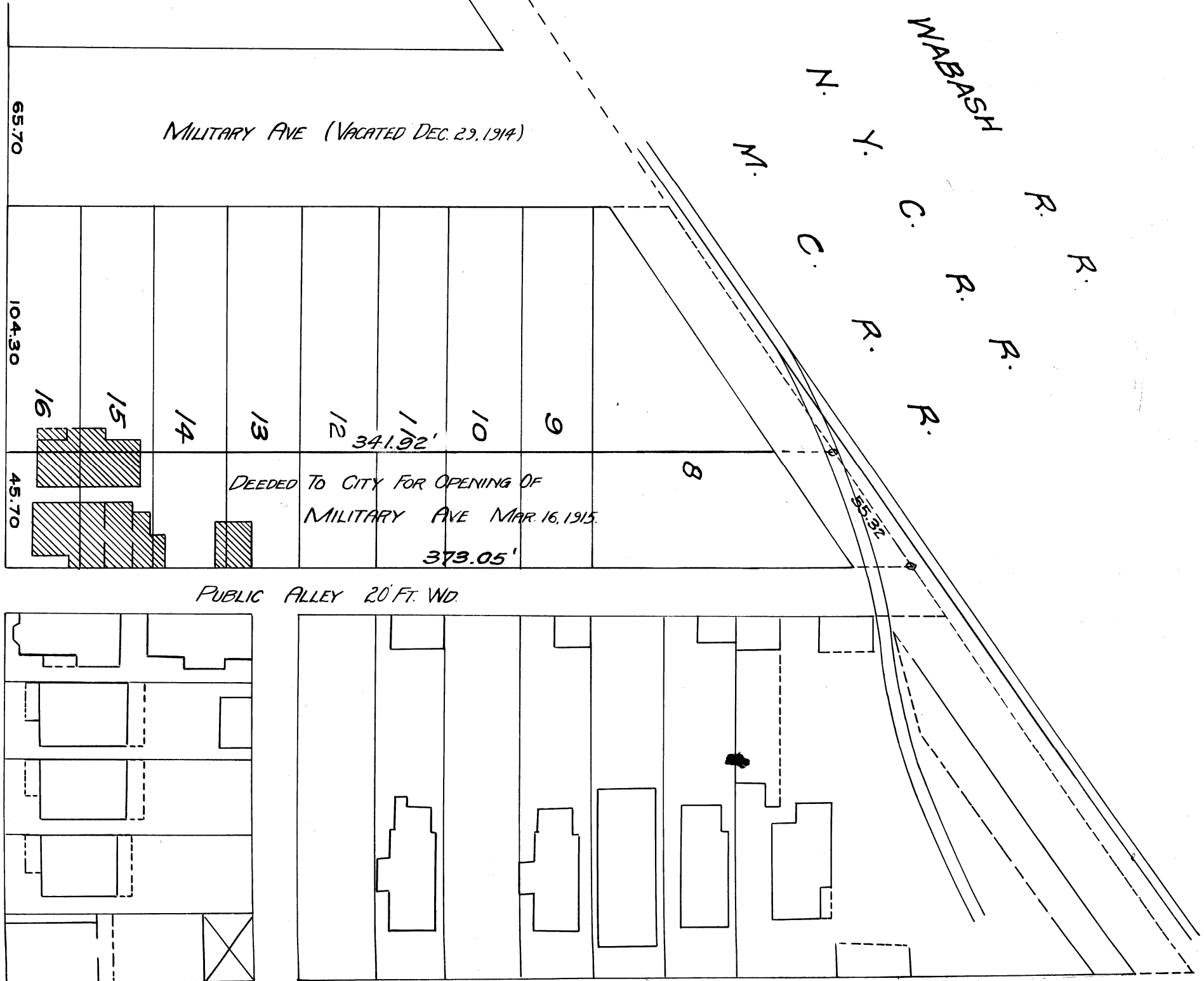


Beam 5 - Plates

City of Detroit	DEPT. OF PUBLIC WORKS
Military Avenue Subway	
LS & MSRR - MCRR - WABASH RR	
McCLINTIC-MARSHALL CONST. CO.	
POTTSTOWN, PA.	
IN CHARGE H.C. FILMAN	MADE BY MEG
CHECKED BY ESC	TRACED BY ESC
REVISED	LAST ASSEM. MK. 9

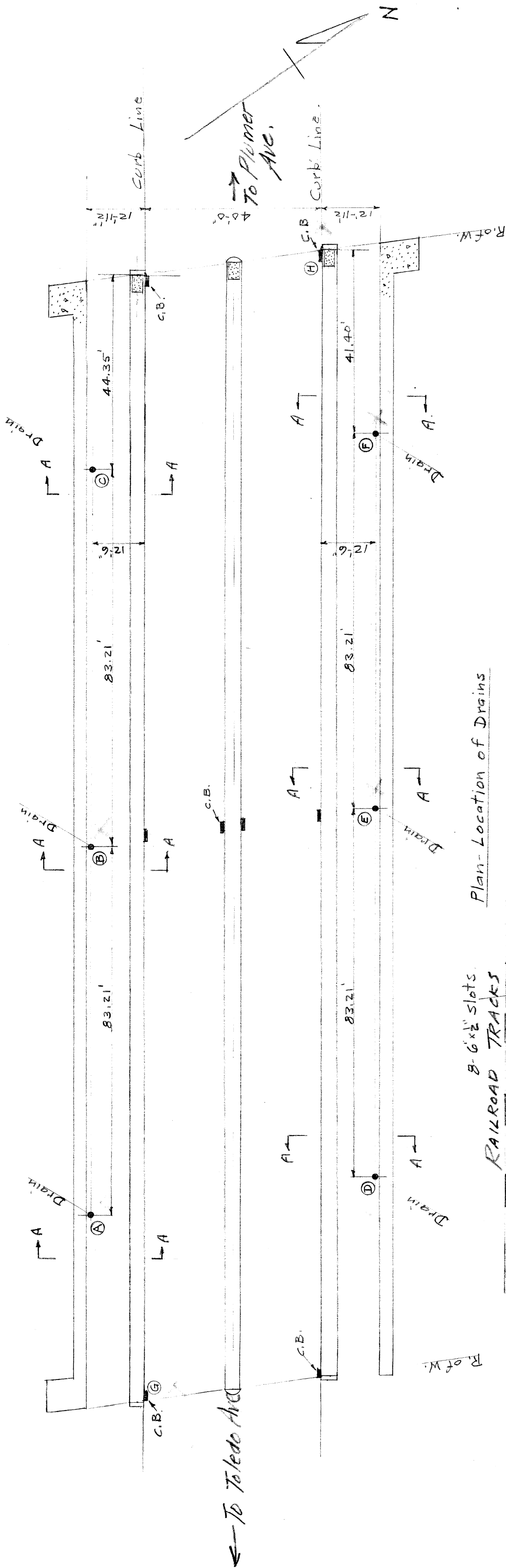
SHEETS - None
 PUNCH HOLES - 15
 REAM None
 MILLING None
 PAINT None except for faces of beams
 B.S. & C. One coat of Red Lead

SHOP No. 93842 R
 CONT. No. 93842 R
 SHEET 2



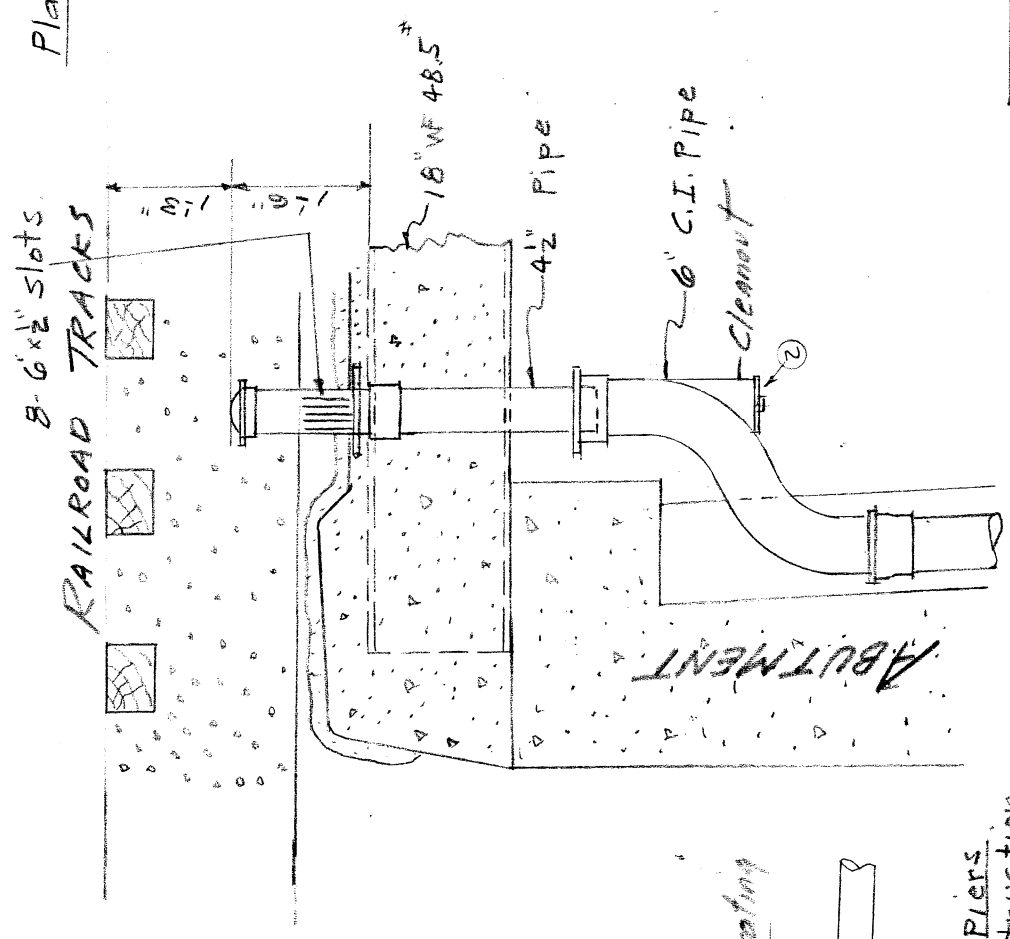
File XU 31-24

5 sheets

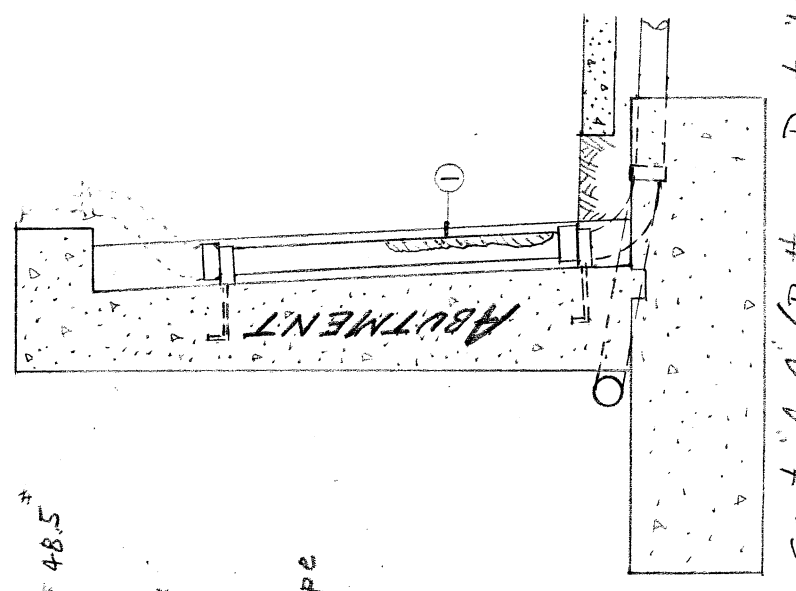


- Inspection Notes 10/13/50
- Ⓐ Hole broken in drain pipe as shown at point ①. Drain is plugged solid at sidewalk level
 - Ⓑ Same condition as at drain ④ with water dripping from around drain plug ② and from top of abutment north of drain.
 - Ⓒ Drain appeared to be satisfactory
 - Ⓓ Water dripping from drain plug ②
 - Ⓔ Drain plug ② is gone with water dripping out.
 - Ⓕ Same condition as drain ⑤. Water dripping across sidewalk from ceiling south of drain.
 - Ⓖ Catch basin plugged solid.
 - Ⓗ Same condition as ④
 - South of drain ④ there is a break in the concrete abutment cap.

Plan - Location of Drains



Sect. A-A
(Top Details)



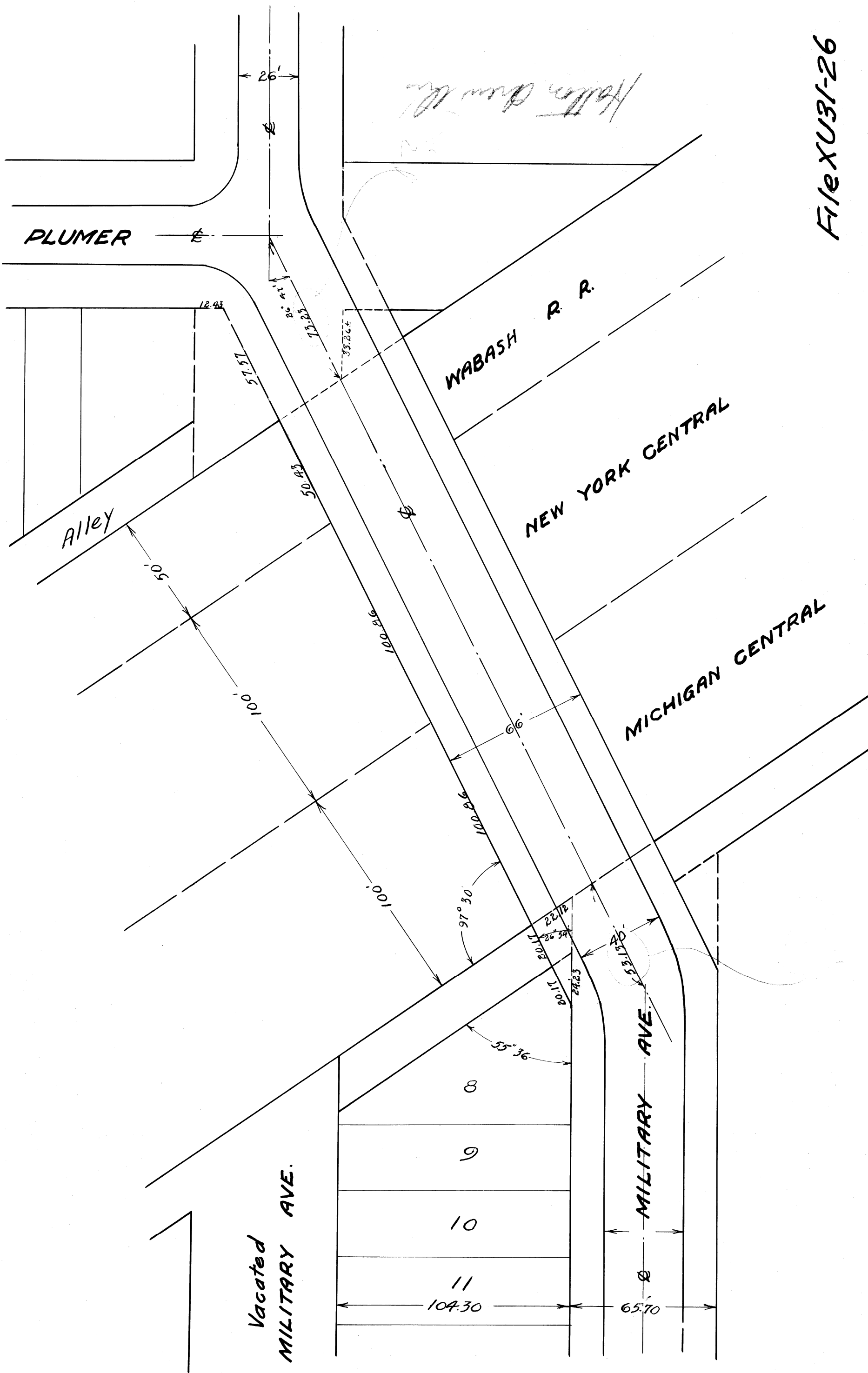
Sect. A-A (Bottom Details)

Typical Section Thru Piers
Showing C.B. Construction

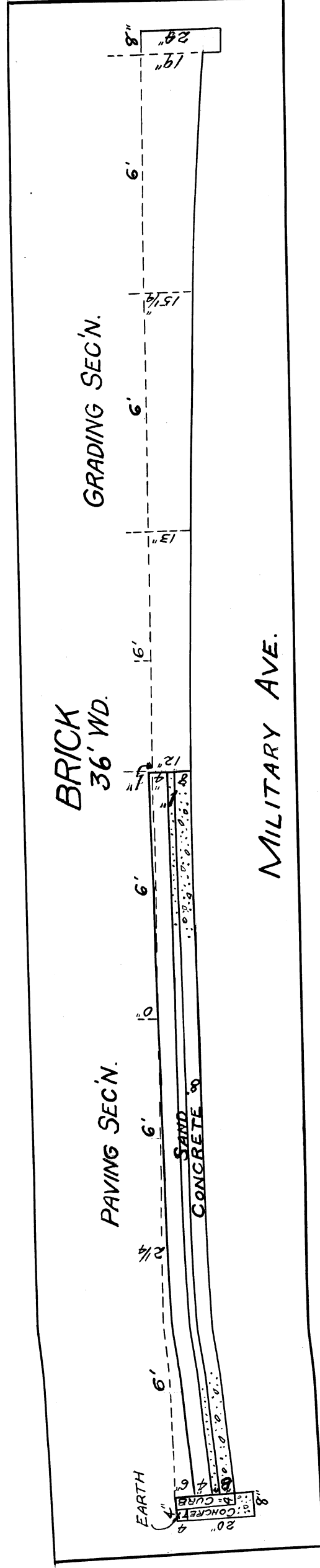
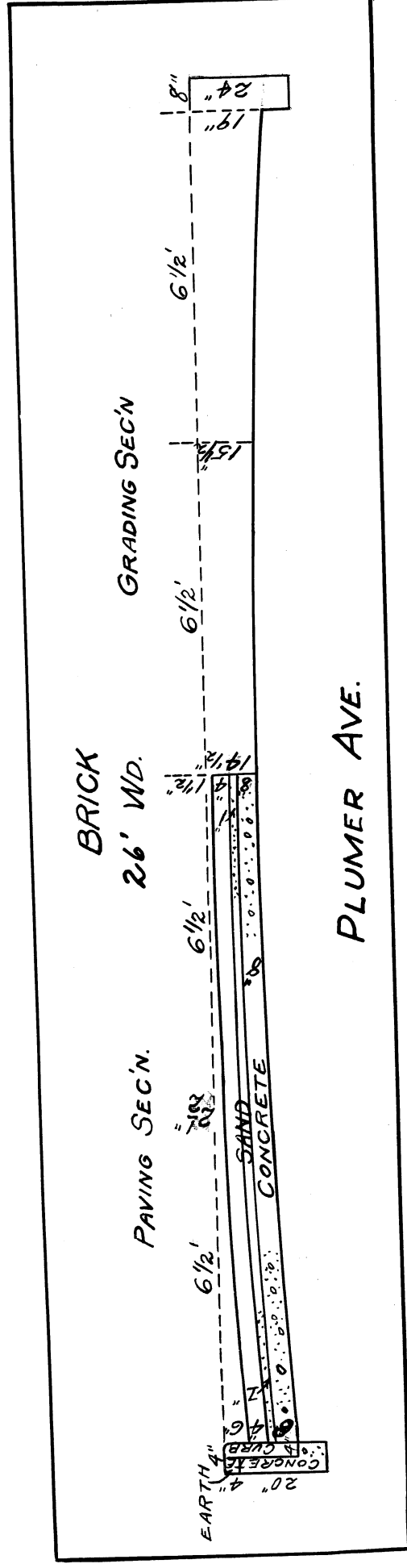
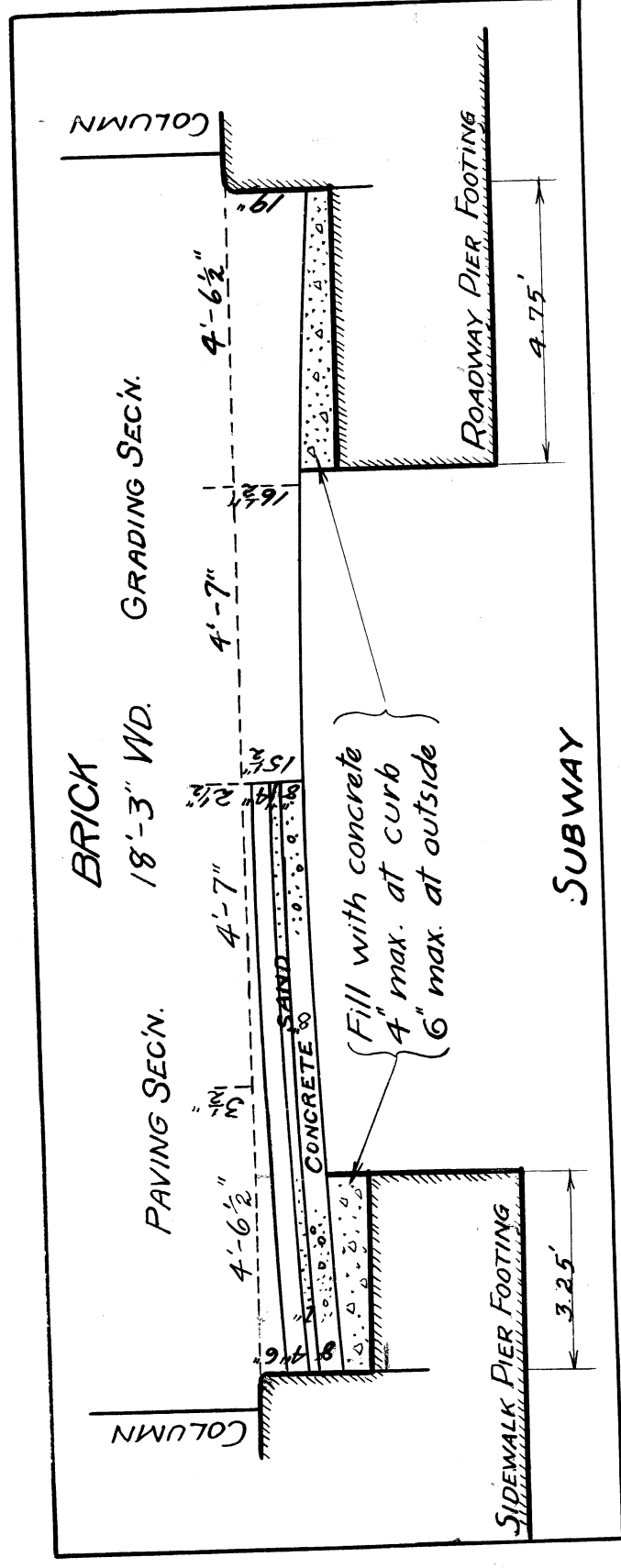
Military Ave Subway Under N.Y.C. & Wabash R.R.
City Engineers Office.

C.E.S. 10-17-50

File XU 31-25 C-1595



File XU31-26



PAVING SECTIONS
FOR
MILITARY AVE.
GRADE SEPARATION
CITY OF DETROIT